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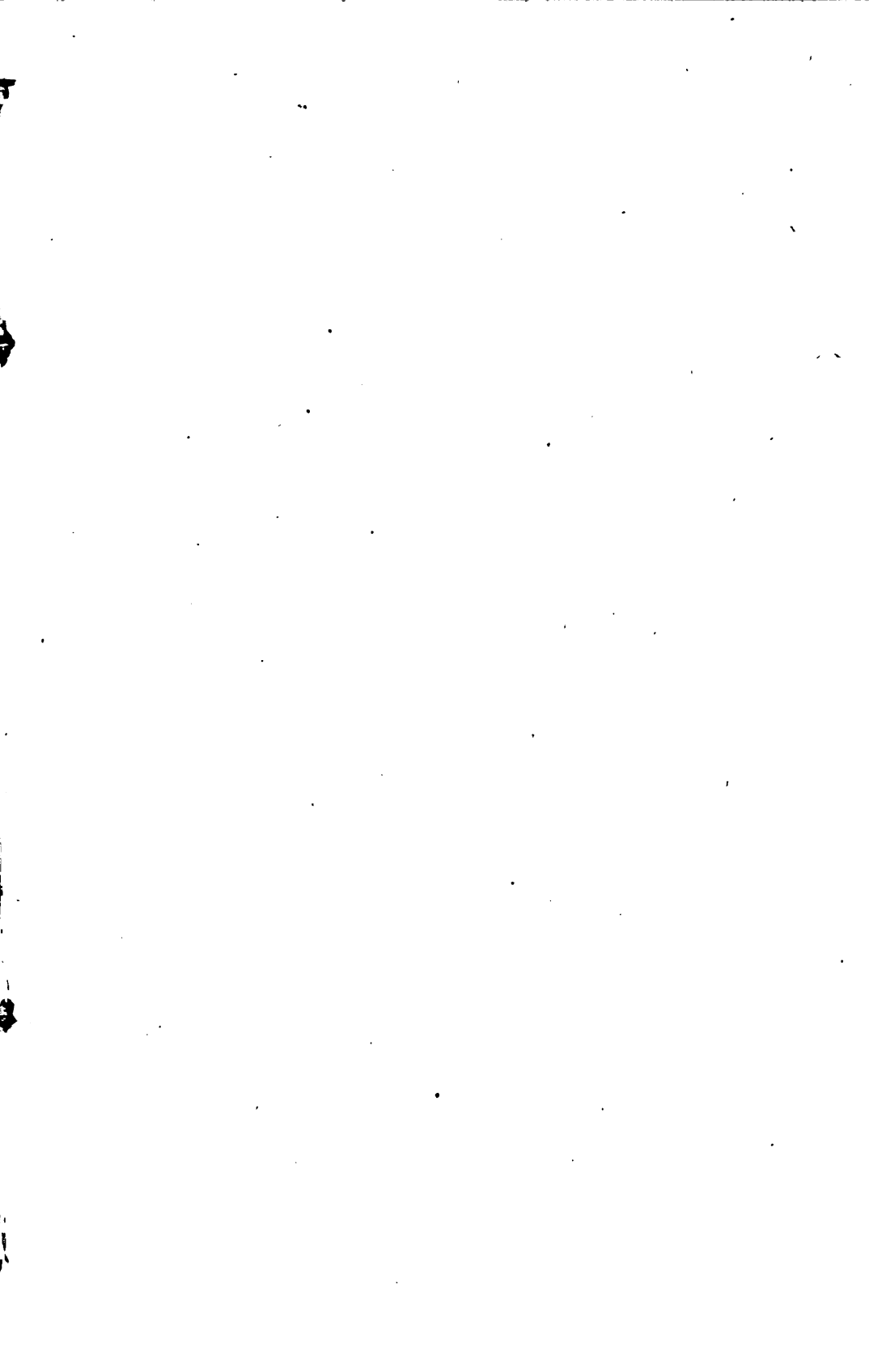
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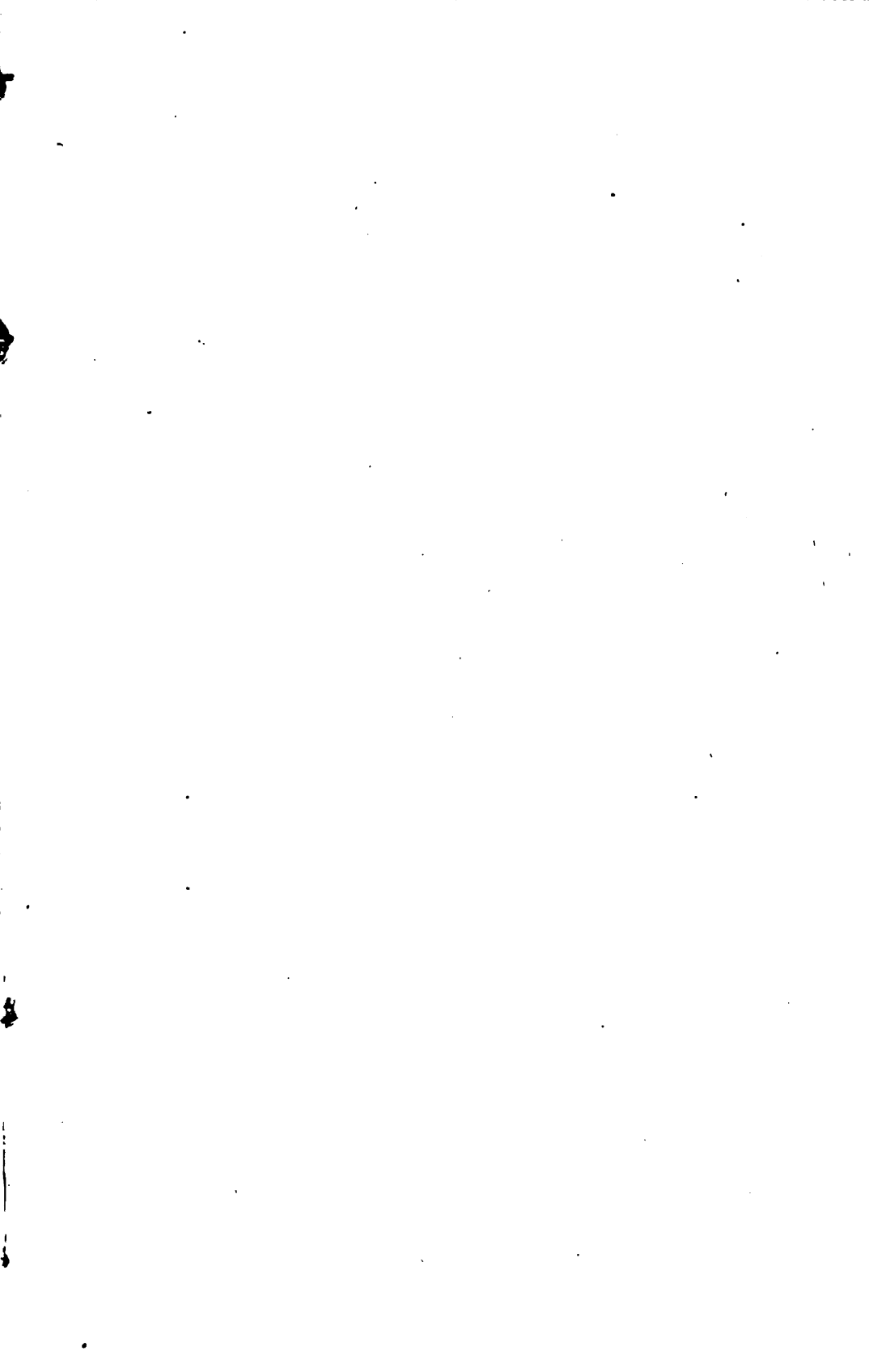


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PREPARED, BY AUTHORITY OF THE SECRETARY OF AGRICULTURE,

BY

SAMUEL HENSHAW.

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Parts I, II, and III.

THE MORE IMPORTANT WRITINGS

OF

BENJAMIN DANN WALSH

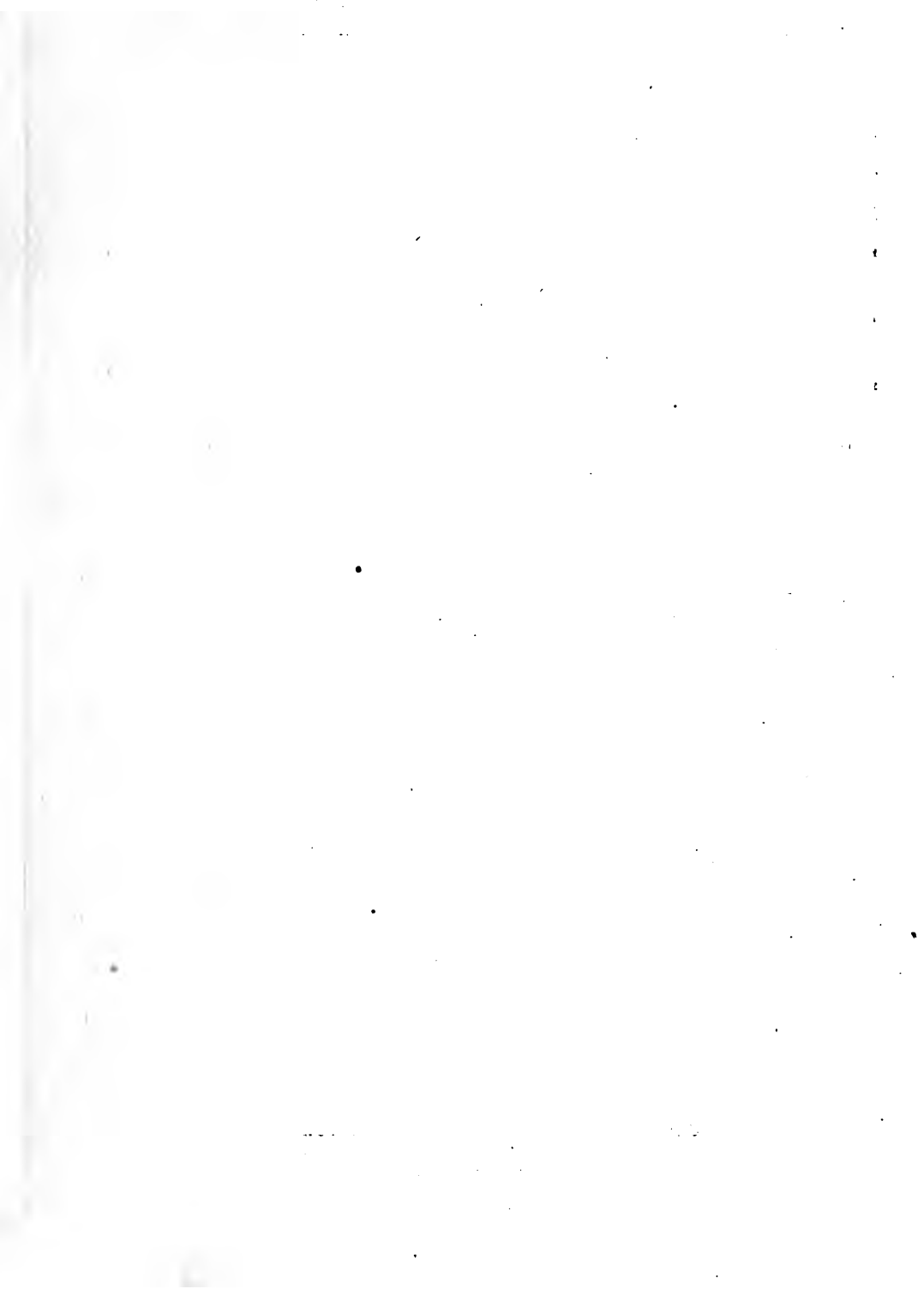
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CHARLES VALENTINE RILEY.

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FORTY-SEVENTH CONGRESS, FIRST SESSION.

CONGRESS OF THE UNITED STATES,  
IN THE HOUSE OF REPRESENTATIVES,

June 24, 1882.

*Resolved*, By the House of Representatives (the Senate concurring) that there be printed, for the use of the Department of Agriculture, one thousand copies of a special report, entitled "Bibliography of Economic Entomology."

Attest:

EWD. MCPHERSON,  
*Clerk.*

Passed the Senate July 6, 1882.

F. E. SHOBER,  
*Acting Secretary.*

A true copy.

EWD. MCPHERSON,  
*Clerk.*

## LETTER OF TRANSMITTAL.

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U. S. DEPARTMENT OF AGRICULTURE,  
DIVISION OF ENTOMOLOGY,  
*Washington, D. C., June 12, 1889.*

SIR: In the absence of Professor Riley, who is now at the Paris Exposition in official capacity, I beg to submit for publication Parts I, II, and III of the Bibliography of American Economic Entomology, which was ordered by Congress in July, 1882. Owing to various unforeseen delays this work has not yet been completed. Its preparation was originally assigned by Professor Riley to Mr. B. Pickman Mann, formerly of this Division, and upon the severance of his connection with the Department, in the fall of 1885, it was turned over in an incomplete and fragmentary condition to Mr. Samuel Henshaw, of Boston, who has added greatly to it and practically rewritten the portions already prepared.

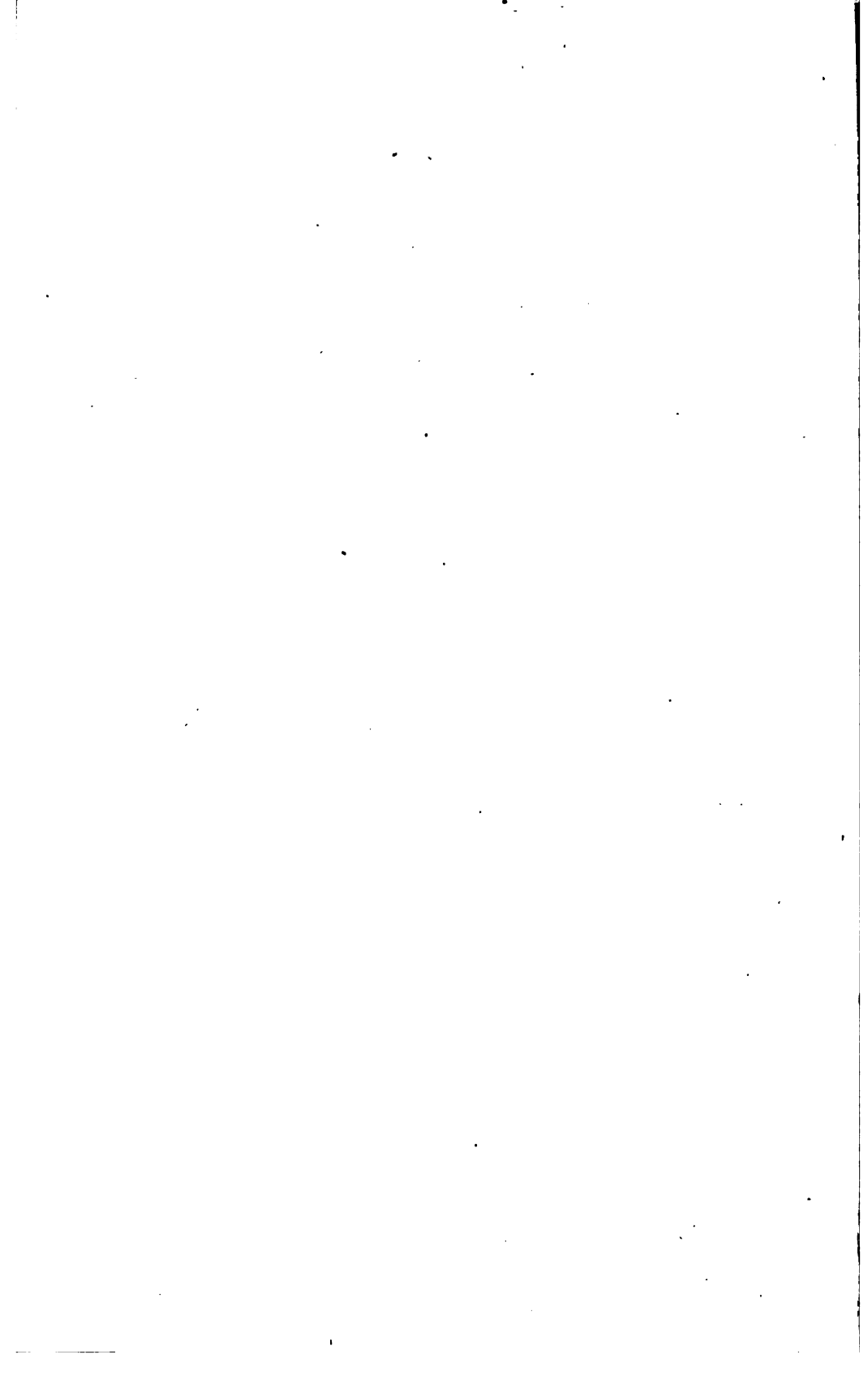
The extent of the work renders it advisable to publish it in several parts, and as there is unquestionably a more urgent need on the part of working economic entomologists for a bibliography of the writings of B. D. Walsh and C. V. Riley than of others, on account of their great number and value, these portions have been finished first. Their immediate publication will probably antecede the publication of the final part only by a few months.

Very respectfully, yours,

L. O. HOWARD,  
*Acting Entomologist.*

Hon. J. M. RUSK,  
*Secretary of Agriculture.*





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## INTRODUCTION TO PARTS I, II, AND III.

The object of the present lists is to record the principal entomological writings of B. D. Walsh and C. V. Riley. Few will be likely to criticize the association of the names of Walsh and Riley in a list of this kind, so largely devoted to economic entomology, or to question the desirability of collating their writings in advance of others.

As recognized authorities upon entomology, especially from an economic standpoint, their writings have been extensively quoted sometimes with, but frequently without, credit in the agricultural and horticultural journals of the day. These secondary references, though of a certain value when the original is inaccessible, have, as a rule, been omitted. In citing such as are given I have used my personal judgment. To have given all would have increased the size of the list considerably with but a slight increase in its usefulness.

Occasionally, a publisher to meet some popular demand puts the writings of an author into book form without the knowledge of the latter. Such an occurrence has happened more than once with Dr. Riley's writings. To mention but one: In 1877 Messrs. George Rutledge & Sons, of London, published "The Colorado beetle, with suggestions for its repression and methods of destruction," with Dr. Riley's name upon the title-page as author. This is a partial reprint of Potato Pests entirely unsanctioned and published without knowledge of the author. (See *London Times*, October 17, 1887.) These publishers' reprints are omitted from this list. The "S.-b." after the reference of many of the articles from the agricultural and other journals refers to the series of scrap-books used in divisional work.

A biographical sketch of Dr. Walsh is given in the second volume of the *American Entomologist*, Vol. II, No. 3, pp. 65-68, January, 1870.

The chief facts in Dr. Riley's life may be found in the "Commonwealth of Missouri" (1875) and the *National Farmer*, September 20, 1883. In the preparation of the list I have freely used all data accumulated by the Division, notably the work of Mr. B. P. Mann and a private list of Dr. Riley's.

Many persons, both within and without the Department, have kindly answered my inquiries.—S. H.



## BIBLIOGRAPHY OF THE MORE IMPORTANT CONTRIBUTIONS TO AMERICAN ECONOMIC ENTOMOLOGY.

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### THE WRITINGS OF B. D. WALSH (1860-1873).

---

1. WALSH, B. D. Bark-lice. <Western Rural. S.-b. No. 3, p. 11.  
Habits of *Lecanium* compared with *Aspidiotus* [= *Mytilaspis*].
2. WALSH, B. D. Entomological notes. <Prairie Farmer, 17 May, 1860, [v. 21], n. s., v. 5, pp. 308-309, figs. S.-b. No. 1, pp. 42-43.  
Notice of *Coccus harrisii* n. sp. [= *Chionaspis furfurus*]; figure of its scales; description and figure of *Capsus oblineatus* [= *Lygus pratensis*] infesting apple, quince, and pear trees; figure of larva case and imago and description of *Phycita nebulo* [= *Acrobasis indiginella*]; figures of imago and of injuries of *Amphicerus bicaudatus*; habits of the same and of *Scolytus* [= *Xyleborus*] *pyri*, *Saperda bivittata* [= *candida*] and *Chrysobothris femorata*; means against the last.
3. WALSH, B. D. "Cutworms." <Prairie Farmer, 9 August, 1860, [v. 22], n. s., v. 6, pp. 82-83, fig. S.-b. No. 1, pp. 84-85.  
Account of the larvæ of *Lachnosterna quercina* [= *fusca*] of *Elateridae* of *Agrotidae* and of *Pangus* [= *Harpalus*] *caliginosus*; figures of larvæ and imagos of the same or allied species; also of *Heteronychus* [= *Ligyrrus*] *relictus*, *Lopha* [= *Bembidium*] *4-maculatum* and *Agonoderus pallipes*.
4. WALSH, B. D. [*Ips quadrisignatus*, Say.] <Prairie Farmer, 1860, [v. 22], n. s., v. 6, p. —.  
*Ips 4-signatus* [= *fasciatus*] attacks growing ears of sweet corn.
5. WALSH, B. D.] "Insect Life." <Proc. Agric. Conv.; Ann. meeting Ill. Nat. Hist. Soc.; Comm. Exerc. State Normal Univ. [Bloomington, Ill.], 1860, pp. 11-12.  
Report, compiled from Chicago papers of address delivered before the Illinois Natural History Society; comparison between injurious insects and an invading army; necessity of appropriations for carrying on entomological work; economic entomology in Europe; importance of beneficial insects.

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PART I.

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BENJAMIN DANN WALSH.

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24. WALSH, B. D. List of the Pseudoneuroptera of Illinois contained in the cabinet of the writer, with descriptions of over forty new species, and notes on their structural affinities. <Proc. Acad. Nat. Sci. Phil., September, 1862, pp. 361-402.  
One hundred and nine (109) species are enumerated; two (2) new genera and forty (40) new species are described. For a list of the same see the *Systematic Index*.
25. WALSH, B. D. [*Erythroneura tricineta* Fitch.] <St. Louis Valley Farmer, October, 1862, pp. 305-306, fig.  
*Erythroneura* [= *Typhlocyba*] *tricincta* on grape-vines.
26. WALSH, B. D. Grasshoppers and locusts. <Journ. Ill. State Agric. Soc., November, 1862, pp. 1-3. Reprint: <Trans. Ill. State Agric. Soc., v. 5, pp. 497-499.  
Injuries of locusts in the Mississippi Valley; differences between locusts and Cicadas.
27. WALSH, B. D. On the genera of *Aphidæ* found in the United States. <Proc. Ent. Soc. Phil., December, 1862, v. 1, pp. 294-311, figs. 1-8.  
Synoptic separation of the genera; list of seventy (70) species found in the United States, with food habitat; *Aphis* [= *Nectarophora*] *rudbeckiæ* Fitch, *A. vitis* ? Scop., *A. maidis* ? Fitch, *Lachnus caryæ* Harris, *Thelaxes* [= *Colopha*] *ulmicola* Fitch are described; one (1) new genus and eleven (11) new species are described; see the *Systematic Index* for a list of the same; the figures show venation and other details. Two (2) new ants, *Formica aphidicola* and *F.* [= *Lasius*] *latipes*, are described.
28. WALSH, B. D. [Observations on *Papilio glaucus* and *P. turnus*.] <Proc. Ent. Soc. Phil., February, 1863, v. 1, pp. 349-352.  
Reasons for considering *turnus* and *glaucus* identical; the latter a dimorphic ♀ of the former; distribution of the two forms; citation of similar case among *Pieridæ* and of analogous one among *Dytiscidæ*; description of larva from which a black ♀ was raised.
29. WALSH, B. D. [Katydid eggs.] <Prairie Farmer, 28 February, 1863, [v. 27], n. s., v. 11, p. 132, fig.  
Oviposition of katydid eggs on apple-twigs.
30. WALSH, B. D. Fire-blight. <Prairie Farmer, 4 April, 1863, [v. 27], n. s., v. 11, p. 212, fig. S.-b., No. 1, p. 10.  
Description and figures of eggs of *Chloroneura malefica* [= *Empoasca viridescens*] and the slits in which they are deposited in apple-twigs; cause of fire-blight; suggestion of remedies.
31. WALSH, B. D. Insects injurious to fruit trees. <Prairie Farmer, 2 May, 1863, [v. 27], n. s., v. 11, p. 276, fig. S.-b., No. 1, p. 9.  
Fruit and foliage of pear-trees destroyed by *Capsus oblineatus* [= *Lygus pratensis*]; description and figure of imago; habits, food-plants, and remedies.
32. WALSH, B. D. The ten-striped spearman. <Prairie Farmer, 6 June, 1863, [v. 27], n. s., v. 11, p. 356, fig. S.-b., No. 1, p. 7.  
History, ravages, and means against *Doryphora 10-lineata*; figure of imago; mentions other injurious *Phytophaga*.

33. WALSH, B. D. The plum-gouger; a new foe of the plum. < *Prairie Farmer*, 13 June, 1863, [v. 27], n. s., v. 11, pp. 372-373, figs. 1-3. S.-b., No. 1, p. 6.

Habits, description, and figures of *Anthonomus* ? *prunicida* n. sp. [= *Coccotorus scutellaris*], injurious to plums; comparison with *Conotrachelus nenuphar*; figure of the latter.

34. WALSH, B. D. The plum-gouger. < *Prairie Farmer*, 11 July, 1863, [v. 28], n. s., v. 12, p. 21, 2 figs. S.-b., No. 1, p. 10.

Distribution and ravages of *Anthonomus prunicida* [= *Coccotorus scutellaris*]; list of insects found on plum-trees; description of *Conotrachelus puncticollis* n. sp. [= *C. geminatus*]; usefulness of *Reduvius raptatorius* [= *Sinea diadema*]; figures *A. prunicida* and *R. raptatorius*.

35. WALSH, B. D. A new fruit foe. < *Prairie Farmer*, 18 July, 1863, [v. 28], n. s., v. 12, p. 37, fig. S.-b., No. 1, p. 11.

Description and figure of imago of *Epicærus imbricatus*; injuries to fruit trees and gooseberry-bushes; supposed habits of this and allied species; hibernation of the larva of *Conotrachelus*; description of *C. oratagi* n. sp.

36. WALSH, B. D. Leaf-hopper. < *Prairie Farmer*, 25 July, 1863, [v. 28], n. s., v. 12, p. 53.

*Proconia* [= *Oncometopia*] *undata* injurious to grape-vines in southern Illinois; its eggs laid in twigs.

37. WALSH, B. D. Locust borers. < *Prairie Farmer*, 15 August, 1863, [v. 28], n. s., v. 12, p. 101. S.-b., No. 1, p. 12.

Description and habits of *Clytus* [= *Cyllene*] *robinia*; *Clytus* of *Carya* does not attack *Robinia*; *Cossus robinia* mentioned; larvæ and imagos of *Nitidulidæ* found under decaying bark.

38. WALSH, B. D. Insect friends and insect foes. The twice-stabbed lady-bird. < *Prairie Farmer*, 1863, [v. 28], n. s., v. 12; 22 August, p. 117, figs. 1, 2; 29 August, p. 133, figs. 3, 4. S.-b., No. 1, pp. 11-12.

Description and figure of imago of *Chilocorus bivulnerus*; figure of larva; destruction of injurious insects by predaceous insects; brief description of and means against *Lytta cinerea* [= *Macrobasis unicolor*], found on potato, English bean, and apple, and *L.* [= *Epicauta*] *vittata*, on potato; figures *Lytta atrata* [= *Epicauta pennsylvanica*], found on aster and potato, and larva-cases of *Solenobia* sp. from under bark of apple-trees; note on allies of *Solenobia*.

39. WALSH, B. D. Observations on certain N. A. Neuroptera, by H. Hagen, M. D., of Königsberg, Prussia; translated from the original French MS., and published by permission of the author, with notes and descriptions of about twenty new N. A. species of Pseudoneuroptera. < *Proc. Ent. Soc. Phil.*, October, 1863, v. 2, pp. 167-272, fig.

Dr. Hagen's comments relate to the species described in No. 24; the author's notes supplement these and describe three (3) new genera and twenty-three (23) new species; for a list of these, see the *Systematic Index*; descriptions of previously described species, with notes on their habits, distribution, etc., are also given; *Batis interlineata* [= *Siphilurus femoratus*] is proposed

## 39. WALSH, B. D.—Continued.

(p. 190) in case *B. [= S.] femorata* Walsh is distinct from *B. [= S.] femorata* Say; in a note (p. 255) *Ophiogomphus mainensis* n. sp. is described from Packard's manuscript; the venation of the *Odonata* and the terminal abdominal characters of *Stalis infusata* are figured.

## 40. WALSH, B. D. On certain remarkable or exceptional larvæ, coleopterous, lepidopterous, and dipterous, with descriptions of several new genera and species, and of several species injurious to vegetation, which have been already published in agricultural journals. &lt;Proc. Bost. Soc. Nat. Hist., February, 1864, v. 9, pp. 286-318.

Habits of the larva of *Cotalpa lanigera*, *Pelidnota punctata*, *Cratonychus [= Melanotus] incertus*, and *Xyloryctes satyrus*; comparative characters of the larva and imago of *Halisidota antiphola* n. sp. [= *tessellaris*]; description of larva, pupa, and imago of *Sphingicampa* (n. g.) *distigma* n. sp. [= *bicolor*]; characters and affinities of *Dryocampa* [= *Sphingicampa*] *bicolor*?; description of imagos of *Limacodes scapha* and *L. ?* [= *Phobetron*] *hyalinus* n. sp., and of larva of the last and *L. ?* [= *Phobetron*] *tetradactylus* n. sp.; description of the larva, pupa, and imago of *Hipparchiscus* n. g. *venustus* n. sp. [= *Aplodes mimosaria*]; habits and description of the larva of an undetermined *Tabanus*, description of the pupa; description of the larva, pupa, and imago of *Midas fulvipes* n. sp., habits of its larva. On pp. 309-318 descriptions of several new species, with brief notes of food-habits, etc., are reprinted from various agricultural journals.

41. WALSH, B. D. On dimorphism in the hymenopterous genus *Cynips*; with an appendix containing hints for a new classification of *Cynipidæ* and a list of *Cynipidæ*, including descriptions of several new species, inhabiting the oak-galls of Illinois. <Proc. Ent. Soc. Phil., March, 1864, v. 2, pp. 443-500, fig.

Detailed observations proving the frequent occurrence of dimorphism in the *Cynipidæ*; *Cynips* [= *Amphibolips*] *aciculata*, a dimorphic form of *C. q. spongifica*; concludes from analogy "that *aciculata* ♀ generates galls which produce by parthenogenesis ♂ *spongifica* exclusively, and that ♀ *spongifica* coupling in June with these ♂ *spongifica* oviposit in the same month in the young buds of the oak, the eggs lying dormant till the following spring, when some of the eggs produce ♀ *spongifica* in June, and some ♀ *aciculata* in the autumn or early in the following spring, which last in their turn, as before mentioned, generate ♂ *spongifica* to appear in the following June;" interesting details concerning the history of the group are given; relations between the true gall-flies (*Peenides*) and parasitic *Cynipidæ* (*Inquilinæ*); classification and characters of the same; anatomical structure and homologies of the family; the list includes fifteen (15) species inhabiting the various oaks, with descriptions of their galls and of several new species; seven (7) species of *Inquilinæ* are described; for the new species, see the *Systematic Index*; the figures illustrate the anatomy of the abdomen and ovipositor.

## 42. WALSH, B. D. The four-humped Curculio. A new foe of the apple. &lt;Valley Farmer. Reprint: &lt;Prairie Farmer, 27 August, 1864, [v. 30], n. s., v. 14, p. 131, 2 figs. S.-b., No. 1, p. 28.

Description and figures of *Anthonomus quadrigibbus*, a foe of the apple; comparison with *Conotrachelus nenuphar* and *Anthonomus prunivida* [= *Coccophorus scutellaris*].

43. WALSH, B. D. On the pupa of the ephemerinous genus *Batisca* Walsh. <Proc. Ent. Soc. Phil., August, 1864, v. 3, pp. 200-206, fig.

Description and figures of the pupa of *Batisca obesa* Say.

44. WALSH, B. D. On certain entomological speculations of the New England school of naturalists. <Proc. Ent. Soc. Phil., August-September, 1864, v. 3, pp. 207-249.

Discussion of statements, chiefly by Prof. L. Agassiz, upon questions in general entomology. The memoir is divided into sections; in the first, the distribution of insects in North America is discussed in opposition to the views of Agassiz; in the second section the Darwinian theory of the origin of species is discussed and some remarks on the variation of several species are added; in the third and fourth sections the statements of Prof. Agassiz regarding the worm-like larva stage of insects and the resemblances between the pupæ of insects and the Crustacea are discussed and criticised; in the fifth section the author argues that the relative rank of the different orders of insects must be determined from a consideration of all the characters of each order and not from the significance of any one character; the sixth section is a review of Dana's classification of insects on the principle of cephalization; and in the seventh section several erroneous statements and generalizations in the same author's paper on classification are pointed out.

45. WALSH, B. D. On phytophagic varieties and phytophagic species. <Proc. Ent. Soc. Phil., November, 1864, v. 3, pp. 403-430.

Many species feed exclusively upon a single food-plant, while other species feed upon many kinds; correlated with this are certain larval or imaginal differences; when these different forms interbreed they are considered the same species and are termed phytophagic varieties; these when separated with a single kind of food-plant form phytophagic races, and these again by a continuation of their isolation form phytophagic species. Phytophagous forms are most abundant where the imago is wingless. *Dia-pheromera velii*, Tingit [= *Gargaphia*] *tiliæ*, and *T.* [= *G.*] *amorphæ* are described as new; the following are mentioned in the remarks upon species and varieties: *Halitica* [= *Disonychia*] *alternata*, *Chrysomela* *scalaris*, *Clytus* [= *Cyllene*] *robinia*, *C.* [= *C.*] *pictus*, *Dryocampa* [= *Sphingicampa*] *bicolor*, *Sphingicampa* *distigma* [= *bicolor*], *Bombyx* [= *Sericaria*] *mori*, *Halisdota* *tessellaris*, *H. caryæ*, *H. antiphola* [= *tessellaris*], *Cynips* [= *Amphidolips*] *q. spongifloa*, *C.* [= *Andricus*] *q. punctata*, *C.* [= *A.*] *q. podagræ*, and *C.* [= *Amphidolips*] *q. inanis*.

46. WALSH, B. D. On the insects, coleopterous, hymenopterous, and dipterous, inhabiting the galls of certain species of willow. Part 1st—Diptera. <Proc. Ent. Soc. Phil., December, 1864, v. 3, pp. 543-644.

Structural characters, habits, metamorphoses, etc., of *Cecidomyidæ*; remarks on the unity of habits in genera; synopsis of cecidomyioidous galls of *Salix*; descriptions of new species, their galls and inquiline; for a list of the new species, see the *Systematic Index*. See No. 197 for Part 2d.

47. WALSH, B. D. The borer. <Colman's Rural World. Reprint; <Prairie Farmer, 6 May, 1865, v. 15, p. 355.

Notice of soap as a means against borers.

48. WALSH, B. D. The new potato-bug and its natural history. <Pract. Ent., 30 October, 1865, v. 1, pp. 1-4.

Record of the spread eastwards of *Doryphora 10-lineata*; description of the egg; food-plants, enemies, and means against the same; comparative characters of *D. juncta* and *D. 10-lineata*; species of *Meloidæ* injurious to the potato.

49. [WALSH, B. D.] The joint-worm. <Pract. Ent., 27 November, 1865, v. 1, pp. 11, 12.

Reasons for disbelieving that the joint-worm is the larva of one of the *Chalcidæ*.

50. WALSH, B. D. On phytophagic varieties and phytophagic species, with remarks on the unity of coloration in insects. <Proc. Ent. Soc. Phil., November-December, 1865, v. 5, pp. 194-216, fig. See: <Amer. Journ. Sci., September, 1865, ser. 2, v. 40, pp. 282-284. <Ann. and Mag. Nat. Hist., November, 1865, ser. 3, v. 16, pp. 383, 384.

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57. [WALSH, B. D.] [Codling moth.] <Pract. Ent., 26 February, 1866, v. 1, p. 34.  
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58. [WALSH, B. D.] [*Aphididæ*.] <Pract. Ent., 26 February, 1866, v. 1, p. 34.  
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Criticism of various worthless remedies against injurious insects.

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Answer to inquiry of A. C. Hammond; *Egeria* [= *Sannina*] *exitiosa* and an elaterid larva attacking plum-trees; the latter probably attracted by decayed matter, the work of the peach borer.

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Note to W.'s "Click-beetles;" snapping of *Elateridae*; Jaeger's Life of N. Am. Insects and Emmons' N. Y. Report unreliable.

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89. WALSH, B. D. [The painted borer.] <Pract. Ent., 25 June, 1866, v. 1, p. 89.

Answer to inquiry of T. C. Wright; sexual difference in the antennæ of *Clytus* [= *Cyllene*] *picatus* bred from hickory.



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91. WALSH, B. D. [Canker-worms.] <Pract. Ent., 25 June, 1866, v. 1, p. 89.  
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92. WALSH, B. D. [Apple-tree tineid.] <Pract. Ent., 25 June, 1866, v. 1, p. 89.  
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93. WALSH, B. D. [Spittle insect.] <Pract. Ent., 25 June, 1866, v. 1, p. 89.  
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97. WALSH, B. D. [White-pine scale.] <Pract. Ent., 25 June, 1866, v. 1, p. 90.  
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Criticism of communications in agricultural papers; tanners' oil injurious to trees; sulphur plugged in trees does not protect the leaves; sheep in an orchard do not keep away *Conotrachelus nenuphar*.
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The insect attacking small grains in Georgia is probably a plant-louse.
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The use of the same vernacular name for different insects causes uncertainty in identifying and in suggesting means against injurious insects.
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Explains the necessity of using Latin for scientific names.

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Answer to inquiry of C. S. Jackson; habits of an undescribed *Fidia*; injuries to vines by plant-louse (*Aphis vitis* ?); enemies of *Aphididae*.

103. WALSH, B. D. [Wire-worms.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of A. D. Cheesebro; summer fallowing as a means against wire-worms.

104. WALSH, B. D. [Bark-lice.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of L. E. Harmon; life-history and means against *Coccidæ*.

105. WALSH, B. D. [Tortoise beetles.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of C. K. Yant; food-plants and larval habits of *Cassididæ*.

106. WALSH, B. D. [Grape bark-louse.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of J. Bird; description and ravages of *Lecanium* [= *Pulvinaria*] *vitis*.

107. WALSH, B. D. [Plum bark-louse.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of O. B. Douglas; description of *Lecanium* sp.

108. WALSH, B. D. [Saw-fly eggs.] <Pract. Ent., 30 July, 1866, v. 1, p. 100.

Answer to inquiry of L. D. Morse; position of saw-fly eggs on oak-leaf; characters of the larvæ of *Tenthredinidæ*.

109. WALSH, B. D. [Wheat midge.] <Pract. Ent., 30 July, 1866, v. 1, p. 101.

Answer to inquiry of R. F.; ravages, description, habits, and means against *Cecidomyia* [= *Diplosis*] *tritici*.

110. WALSH, B. D. [Wheat midge.] <Pract. Ent., 30 July, 1866, v. 1, p. 101.

Answer to inquiry of M. H. Boye; *Cecidomyia* [= *Diplosis*] *tritici* not infrequently passes from larval to imaginal state in the same season; means against the same.

111. WALSH, B. D. [Grape galls.] <Pract. Ent., 30 July, 1866, v. 1, p. 101.

Answer to inquiry of J. H. Foster, jr.; description of the galls and larvæ of *Cecidomyidæ*.

112. WALSH, B. D. [Apple-tree web-caterpillar.] <Pract. Ent., 30 July, 1866, v. 1, p. 101.

Answer to inquiry of Marion Hobart; description of the eggs of *Clisiocampa americana*; food-plants of the same and of *Hyphantria textor* [= *cunea*].

113. WALSH, B. D. [Grape-vine beetles.] <Pract. Ent., 30 July, 1866, v. 1, p. 101.  
Answer to inquiry of M. S. Hill; food-habits of the larva and imago of *Pelidnota punctata* and of *Anomala lucicola*.
114. WALSH, B. D. [Bot-flies.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.  
Answer to inquiry of J. B. Fisher; habits and hosts of several species of *Estridae*; parasite infesting *Triplax* [= *Tritoma*] *thoracica*. See No. 153.
115. WALSH, B. D. [Spruce-tree saw-flies.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.  
Answer to inquiry of J. Barratt; description of cocoon and imago of *Lophyrus abietis*; means against the same. See Pract. Ent., v. 1, p. 114.
116. WALSH, B. D. [Stings of insects.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.  
Answer to inquiry of A. O. Brickman; effects of the stings of bees and other insects.
117. WALSH, B. D. [Blackberry scale.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.  
Answer to inquiry of G. E. Brackett; characters of *Lecanium* sp. infesting blackberry.
118. WALSH, B. D. [Eggs in sumach.] <Pract. Ent., 30 July, 1866, v. 1, p. 102.  
Answer to inquiry of W. M. Smith; eggs of *Oorchelimum* sp.? or *Xiphidium* sp.? in pith of sumach.
119. W[ALSH], B. D. The "new potato-bug" in Maine. <Pract. Ent., 27 August, 1866, v. 1, p. 105.  
Extract from Maine Farmer, 26 July, 1866, with comments; the larva of *Lema trilineata* mistaken for that of *Doryphora 10-lineata*.
120. WALSH, B. D. [The army-worm.] <Pract. Ent., 27 August, 1866, v. 1, p. 107.  
Extract from Western Rural, 21 July, 1866, with comments; army-worm mistaken for canker-worm; need of precision in using popular names.
121. W[ALSH], B. D. [Fire-cure for potato-beetles.] <Pract. Ent., 27 August, 1866, v. 1, pp. 107-108.  
Extract from letter from M. S. Hill, with comments; burning straw effective as a means against *Meloidae* infesting potato-vines; its use against *Doryphora 10-lineata*; hot water as a means against the onion-maggot and peach-borer.
122. WALSH, B. D. A new humbug. <Pract. Ent., 27 August, 1866, v. 1, pp. 108-110.  
Exposure of proposed remedy against *Cecidomyia destructor*; life-habits of the same.
123. W[ALSH], B. D. The striped bug. <Pract. Ent., 27 August, 1866, v. 1, p. 110, figs. 1, 2.  
Extract from Western Rural, 21 July, 1866, with comments; characters, habits, means against, and figures of *Diabrotica vittata* and *D. 12-punctata*. See No. 148.

124. WALSH, B. D. [Grape-vine caterpillars.] <Pract. Ent., 27 August, 1866, v. 1, p. 111.

Answer to inquiry of B. Borden; description of the early stages of *Proctris* [= *Acolothus*] *falsarius*; characters and habits of the species of *Proctris*.

125. WALSH, B. D. [Squash-vine insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 111.

Answer to inquiry of J. Cope; description and habits of *Eptilachna borealis*; habits of *Coccinellidæ*; description and means against the larva of *Trochilium cucurbitæ* [= *Melittia ceto*].

126. WALSH, B. D. [Injurious insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 111.

Answer to inquiry of T. Conard; larval habits and means against *Lema trilineata*; work of the grain plant-louse (*Nectarophora granaria*) and of *Trochilium cucurbitæ* [= *Melittia ceto*]; mention of some of the enemies of bees.

127. WALSH, B. D. [Grape-leaf galls.] <Pract. Ent., 27 August, 1866, v. 1, pp. 111, 112.

Answer to inquiry of E. Daggy; description of the leaf-gall of *Phylloxera vitifoliæ* [= *vastatrix*]; reasons for including it in the *Coccidæ*; dipterous enemy of the same. See No. 154.

128. WALSH, B. D. [Grape-vine insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 112.

Answer to inquiry of W. H. S.; description and means against an undescribed gall on the tendrils and leaf-stalks of a grape-vine; life-habits of parasitic *Chalcididæ*. See No. 160.

129. WALSH, B. D. [Grape-vine beetles.] <Pract. Ent., 27 August, 1866, v. 1, pp. 112, 113.

Answer to inquiry of W. J. Lawrence; food-habits of *Pelidnota punctata* and of *Colaspis flavida*.

130. WALSH, B. D. [*Corydalis cornutus*.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.

Answer to inquiry of J. S. Lewis; natural history and habits of *Corydalis cornutus*.

131. WALSH, B. D. [Tobacco-moth.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.

Answer to inquiry of F. W. Noble; transformations and food-plants of *Sphinx* [= *Protoparce*] *carolina*; food-plants of *S. 5-maculata* [= *P. celsus*].

132. WALSH, B. D. [*Datana ministra*.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.

Answer to inquiry of S. S. Lacy; food-plants and transformations of *Datana ministra*.

133. WALSH, B. D. [Grape-vine and fuschia beetles.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.

Answer to inquiry of F. K. Phoenix; *Colaspis flavida* injurious to grape-vine shoots; *Haltica exapta* [= *carinata*] destructive to fuschia; means against flea-beetles.

134. WALSH, B. D. [Blister-beetles.] <Pract. Ent., 27 August, 1866, v. 1, p. 113.

Answer to inquiry of J. Barber; food-plants of *Lytta marginata* [= *Epicauta cinerea*], *L.* [= *E.*] *vittata*, *L. atrata* [= *E. pennsylvanica*], and *L. cinerea* [= *Macrobasis unicolor*].

135. WALSH, B. D. [*Colaspis flavida*; *Lema trilineata*.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.

Answer to inquiry of J. F. Benner; *Colaspis flavida* destructive to grape-vines; distribution and method of breeding *Lema trilineata*.

136. WALSH, B. D. [Green worms on gooseberries and currants; *Lema trilineata*.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.

Answer to inquiry of H. Burt; gooseberries and currants injured by larva of a saw-fly?; effects of excessive rain, heat, and drought; food-plants of *Lema trilineata*.

137. WALSH, B. D. [Galls.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.

Answer to inquiry of H. Shimer; note of galls made by *Rhodites radicum*, *Trypeta solidaginis*, and *Thelaxes* [= *Colopha*] *ulmicola*.

138. WALSH, B. D. [Potato and corn insects.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.

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139. WALSH, B. D. [Cocoons on apple-trees.] <Pract. Ent., 27 August, 1866, v. 1, p. 114.

Answer to inquiry of M. S. Hill; description of cocoon and imago of *Attacus cecropia*; the interaction of organisms.

140. WALSH, B. D. Imported insects; the gooseberry saw-fly. <Pract. Ent., 29 September, 1866, v. 1, pp. 117-125, fig.

List of some injurious European insects imported into America and of American insects imported into Europe; reasons for the increase and abundance of noxious European insects in America, and why American species do not flourish in Europe; natural history, description, and means against *Nematus ventricosus* [= *ribesii*]; figure of currant-leaf, showing method of deposition of eggs and work of larva; natural history and description of larva and imago of *Pristiphora grossulariæ* n. sp.; number of saw-flies infesting the gooseberry and currant in Europe.

141. WALSH, B. D. [Borers.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

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142. WALSH, B. D. [Wheat midge.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

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143. WALSH, B. D. [Crickets.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

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144. WALSH, B. D. [Walking-stick.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

Answer to inquiry of L. W. Taylor; characters and habits of *Spectrum* [= *Diapheromera*] *femorata*.

145. WALSH, B. D. [Apple-tree insects.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

Answer to inquiry of H. B. Beegle; characters and food-plants of *Limenitis urula*; description and food-plants of the larva of *Lagoa opercularis*; characters of the imago.

146. WALSH, B. D. [Mites on grasshoppers.] <Pract. Ent., 29 September, 1866, v. 1, p. 126.

Answer to inquiry of W. Riddell; *Astoma* [= *Trombidium*] *locustarum* infesting *Caloptenus femur-rubrum*.

147. W[ALSH], B. D. Grasshoppers and locusts. <Pract. Ent., October, 1866, v. 2, pp. 1-5, 22.

Description, migration, and ravages of *Caloptenus spretus*; limits of its range and means of preventing its increase; confusion caused by the use of popular names of insects. On p. 22 a "note," accidentally omitted, gives the comparative length of the wing-covers and antennæ of *Caloptenus spretus* and *C. femur-rubrum*.

148. W[ALSH], B. D. The striped cucumber-bug. <Pract. Ent., October, 1866, v. 2, p. 5.

*Diabrotica vittata* attacks German asters. See No. 123.

149. W[ALSH], B. D. Fire-blight. <Pract. Ent., October, 1866, v. 2, p. 7.

Extract from Horticulturist, with comments; cause of fire-blight unknown; not produced by *Scolytus* [= *Xyleborus*] *pyri*.

150. W[ALSH], B. D. The Hessian fly. <Pract. Ent., October, 1866, v. 2, p. 7.

Extract from Colman's Rural World, with comments; late sowing as a means against *Cecidomyia destructor*.

151. [WALSH, B. D.] [Injurious caterpillars; plant-lice enemies.] <Pract. Ent., October, 1866, v. 2, pp. 7-8.

Answer to inquiry of T. McGraw; habits, descriptions, and food-plants of larva of *Dryocampa senatoria* and of *Datana ministra*; food-habits of larva allied to *D. ministra*; description and habits of larva of *Scymnus* sp.; *S. hamorrhous?* bred from gall of *Thelaxes* [= *Colopha*] *ulmicola*.

152. [WALSH, B. D.] [Tomato-worm.] <Pract. Ent., October, 1866, v. 2, p. 8.

Answer to inquiry of A. A. Jackson; description of the larva and pupa of *Protoparce celens*; food-plants and harmlessness of the larva.

153. [WALSH, B. D.] [Dipterous larva on swallows.] <Pract. Ent., October, 1866, v. 2, p. 8.  
 Answer to inquiry of J. B. Fisher; larvæ found on swallows (see No. 114) belong to the *Muscidae* and not to the *Estriidae*; extract from letter of Osten Sacken on larval habits of *Muscidae* found with birds.
154. [WALSH, B. D.] [Bark-louse enemy.] <Pract. Ent., October, 1866, v. 2, p. 8.  
 Answer to inquiry of E. Daggy; see No. 127; according to Osten Sacken the bark-louse enemy belongs to *Leucopis*; systematic position of the genus.
155. [WALSH, B. D.] [Parasitized tomato-worm.] <Pract. Ent., October, 1866, v. 2, pp. 8-9.  
 Answer to inquiry of T. C. Wright; habits of *Microgaster*, parasitic on *Protoparce celeus*; habits of ichneumonized larvæ.
156. [WALSH, B. D.] [Beetles on buttercup and azalea.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of C. H. Peck; identification of *Galeruca* [= *Adimonia*] *rufosanguinea*, found on *Ranunculus acris*, and of *Prasocuris varipes* on *Azalea nudiflora*; synoptic table, by J. L. Leconte, of the species of *Prasocuris*.
157. [WALSH, B. D.] [Flying-bug.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of E. E. Sheldon; *Aphodius* mistaken for *Cicadomyia destructor*.
158. [WALSH, B. D.] [Parasitic cocoon.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of H. W. Howarth; description of cocoons made by *Microgaster* and *Pezomachus*; habits of *Ichneumonidae*.
159. [WALSH, B. D.] [Oak-bark louse.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of T. Meehan; undetermined *Coccus* on red-oak.
160. [WALSH, B. D.] [Grape-galls.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of W. H. S.; see No. 128; larva of *Leucopis* sp., an enemy to grape-vine gall-louse; probable identity of the maker of the tendril and leaf-galls; varieties of grape infested by *Phylloxera vastatrix*.
161. [WALSH, B. D.] ["Saddle-back."] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of T. M. Harvey; food-plants, description, and urticating properties of *Empretia stimulea*.
162. [WALSH, B. D.] [Corn-worm.] <Pract. Ent., October, 1866, v. 2, p. 9.  
 Answer to inquiry of J. B. Ellis; method of work of two lepidopterous larvæ.
163. [WALSH, B. D.] [Insects named.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of W. C. Fish; comparative characters of *Enthia sinuata* and *E.* [= *Pubilia*] *concava*.

164. [WALSH, B. D.] [Grape insects.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of J. H. Garman; description and habits of larva of *Proctos* [= *Harrisina*] *americana*; *Proconia* [= *Oncometopia*] *undata* and several species of *Erythroneura* [= *Typhlocyba*] as grape enemies.
165. [WALSH, B. D.] [*Datana ministra*.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of J. B.; increase of injuries caused by *Datana ministra*; distinctive characters of the larvæ of *Geometridæ*.
166. [WALSH, B. D.] [*Iulus marginatus*.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of T. Wiggins; characters and food of *Iulus* [= *Spirobolus*] *marginatus*.
167. [WALSH, B. D.] [Midge.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of W. G. Morris; characters and habits of the larva and imago of *Chironomus* sp.
168. [WALSH, B. D.] [Rat-tailed larva.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of J. A. Lapham; characters and habitats of the larvæ of rat-tailed *Syrphidæ*.
169. [WALSH, B. D.] [Beetle on thistle.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of W. S. Robertson; characters and food-plants of *Phyllobrotica* [= *Diabrotica*] *longicornis*.
170. [WALSH, B. D.] [Grape-vine *Aphis*.] <Pract. Ent., October, 1866, v. 2, p. 10.  
 Answer to inquiry of H.; grape-vine injured by *Aphis vitis*.
171. W[ALSH], B. D. The new potato-bug. <Pract. Ent., November, 1866, v. 2, pp. 13-16, fig.  
 Eastern progress of *Doryphora 10-lineata*; rate of travel; hand-picking the only effective remedy; description of a horse machine for their destruction; pecuniary loss inflicted by the species.
172. W[ALSH], B. D. The canker-worm <Pract. Ent., November, 1866, v. 2, p. 16.  
 Tarring trees effective against *Paleacrita vernata*.
173. W[ALSH], B. D. The canker-worm again. <Pract. Ent., November, 1866, v. 2, pp. 16-17.  
 Critical review of article in New England Farmer; value of tarring as a means against *Paleacrita vernata*.
174. WALSH, B. D. Notes by Benj. D. Walsh. <Pract. Ent., November, 1866, v. 2, pp. 19-20.  
 Remarks on statement of H. Shimer in his paper, "The grape leaf gall-occus" (Pract. Ent., pp. 17-19); number of eggs to each ♀; tendril and leaf-galls probably produced by the same insect; old leaves entirely free from bark-lice by the end of summer; characters of the pupa of *Leucopsis*; systematic position and food-habits of *Thysanoptera*; criticism of paper by H. Shimer in Prairie Farmer, 3 November, 1861.



175. W[ALSH], B. D. The striped bug. <Pract. Ent., November, 1866, v. 2, p. 20.  
Remarks on note by A.; effects of plaster as a means against *Diabrotica vittata*.
176. [WALSH, B. D.] [Currant insects; *Psocus venosus*.] <Pract. Ent., November, 1866, v. 2, p. 20.  
Answer to inquiry of I. Hicks; occurrence of *Pristiphora grossularia* in the Eastern States; *Ellopia* [= *Eustichia*] *ribearia* injurious to currant; date of introduction of "sulphur-cure" on peach-trees; characters and habits of *Psocus venosus*.
177. [WALSH, B. D.] [Worm in apple.] <Pract. Ent., November, 1866, v. 2, pp. 20-21.  
Answer to inquiry of C. Ward; description and ravages of larva of *Trypeta pomonella*?
178. [WALSH, B. D.] [Insects attracted to light.] <Pract. Ent., November, 1866, v. 2, p. 21.  
Answer to inquiry of Practical Pomologist; conditions favorable for attracting insects to light; kinds most frequently attracted; the proportion of injurious species attracted.
179. [WALSH, B. D.] [Zebra caterpillar.] <Pract. Ent., November, 1866, v. 2, p. 21.  
Answer to inquiry of J. H. Parsons; description of the larva of *Mamestra picta*; times of transformation.
180. [WALSH, B. D.] [Inquiries answered.] <Pract. Ent., November, 1866, v. 2, p. 21.  
Answer to inquiry of J. Pettit; identification of several beetles; galls on golden-rod made by *Euryptychia saligneana* and *Trypeta solidaginis*; characters of short-winged form of *Micropis* [= *Blissus*] *leucopterus*; its occurrence in Canada.
181. [WALSH, B. D.] [Worm in corn.] <Pract. Ent., November, 1866, v. 2, pp. 21-22.  
Answer to inquiry of J. B. Ellis; description of larva, habits, transformations, and means against an undetermined noctuid.
182. [WALSH, B. D.] [Bag-worms.] <Pract. Ent., November, 1866, v. 2, p. 22.  
Answer to inquiry of C. P. Wickersham; characters and synonymy of *Thyridopteryx ephemeraformis*.
183. [WALSH, B. D.] [Ichneumon cocoons.] <Pract. Ent., November, 1866, v. 2, p. 22.  
Answer to inquiry of S. A. N.; characters of cocoons of *Microgaster* sp.?
184. WALSH, B. D. Note. <Proc. Ent. Soc. Phil., December, 1866, v. 5, p. 260.  
Withdraws assertion attributed to C. R. Osten Sacken.
185. W[ALSH], B. D. The old-fashioned potato-bugs. <Pract. Ent., December, 1866, v. 2, pp. 25-27, figs.  
Natural history and means against *Lema trilineata*, *Lytta* [= *Epicauta*] *vittata*, *L. atrata* [= *E. pennsylvanica*], *L. marginata* [= *E. cinerea*], and *L. cinerea* [= *Macrobasis unicolor*]; figures *L. trilineata* and *E. vittata*.

186. W[ALSH], B. D. Klippart's wheat plant. <Pract. Ent., December, 1866, v. 2, pp. 27-29.  
Adverse criticism of the entomological portion of the above-named book.
187. W[ALSH], B. D. Trimble's insect enemies of fruit and fruit trees. <Pract. Ent., December, 1866, v. 2, pp. 29-30.  
Favorable review of the above-named book.
188. W[ALSH], B. D. Answer to the above, by B. D. W. <Pract. Ent., December, 1866, v. 2, pp. 31-33, figs.  
Answers to questions asked in J. S. Houghton's "Insects in the Orchard" (Pract. Ent., pp. 30-31); food-habits and hibernation of *Conotrachelus nenuphar*; comparative characters and figures of *Aspidiotus conchiformis* [= *Mytilaspis pomorum*] and *Coccus harrisi* [= *Chionaspis furfurus*]; natural history of *C. harrisi*; means against and enemies of the two species; figures *Chilocorus bivulnerus* and *Hippodamia* [= *Megilla*] *maculata*; food-habits and synonymy of *Lytta* [= *Pomphopæa*] *sayi*; flowing as a means against root-feeding insects; inefficacy of salt, lime, ashes, etc., against the same; insects attacking evergreens not likely to injure fruit trees; cannibal habits of spiders; habits of bees and wasps.
189. [WALSH, B. D.] [Cicada; gooseberry-worm.] <Pract. Ent., December, 1866, v. 2, p. 33.  
Answer to inquiry of M. S. Hill; *Cicada* [= *Tibicen*] *septendecim* compared with an undescribed species; ravages of *Pristiphora grossulariæ*? on gooseberry bushes.
190. [WALSH, B. D.] [*Vespidæ*.] <Pract. Ent., December, 1866, v. 2, pp. 33, 34.  
Answer to inquiry of M. Hobart; life-habits of *Vespidæ*.
191. [WALSH, B. D.] [Meal-worms: Timber-borers.] <Pract. Ent., December, 1866, v. 2, p. 34.  
Answer to inquiry of M. C. D.; characters, food-habits, and means against *Tenebrio molitor* and *T. obscurus*; characters of *Ptinus brunneus* infesting pine timber; corrosive sublimate as a means against timber insects.
192. [WALSH, B. D.] [Corn-worm.] <Pract. Ent., December, 1866, v. 2, p. 34.  
Answer to J. B. Ellis; number of broods of *Heliothis armigera* in the Northern and Southern States.
193. [WALSH, B. D.] [Thousand-legged worms.] <Pract. Ent., December, 1866, v. 2, pp. 34-35, fig.  
Answer to inquiry of G. W. Robinson; description and figure of *Iulus multi-striatus* n. sp. [= *Cambala annulata*]; habits and means against the same.
194. [WALSH, B. D.] [Cranberry-galls, etc.] <Pract. Ent., December, 1866, v. 2, p. 35.  
Answer to inquiry of W. C. Fish; occurrence of galls made by *Cecidomyia* sp. on leaves of cranberry; identification of several insects.
195. [WALSH, B. D.] Another humbug. <Pract. Ent., December, 1866, v. 2, p. 35.  
Extract, with comments, from Cultivator and Country Gentleman, 22 November, 1866, exposing worthlessness of P. B. Sheldon's composition for destroying borers,

196. [WALSH, B. D.] Notices. <Pract. Ent., December, 1866, v. 2, p. 35.  
 . Mention of several agricultural journals.
197. WALSH, B. D. On the insects, coleopterous, hymenopterous, and dipterous, inhabiting the galls of certain species of willow. Part 2d and last. <Proc. Ent. Soc. Phil., December, 1866-January, 1867, v. 6, pp. 223-288.  
 See No. 46 for Part 1st. Supplementary notes on the *Cecidomyida* (gall-makers and guest-flies); criticism of statements of Fitch and Harris; discussion of structure and habits of *Tenthredinida* and insects generally; synopsis of tenthredinoid willow-galls; descriptions of the galls, their makers andinquillines; for the new species described, see the *Systematic Index*; remarks on species and varieties; figures fore-wings of *Tenthredo* and *Ichneumon*.
198. W[ALSH], B. D. Plant-lice—their friends and enemies. <Pract. Ent., January, 1867, v. 2, pp. 37-44, figs.  
 Method of work and mode of reproduction of *Aphidida*; their relations to ants; plant-lice enemies; figures *Aphis mali* and several enemies of plant-lice; means against *Aphidida*.
199. W[ALSH], B. D. Birds *versus* insects. <Pract. Ent., January, 1867, v. 2, pp. 44-47.  
 Insectivorous birds not necessarily beneficial; a bird must be shown to eat at least thirty (30) times as many injurious insects as it does beneficial ones before it can be considered useful.
200. [WALSH, B. D.] [Insects named.] <Pract. Ent., January, 1867, v. 2, p. 47.  
 Answer to inquiry of J. Pettit; identification of many species, mostly beetles; characters and food-habits of *Clerus nigripes* [= *4-guttatus*]; habitat of *Lep-tura capitata* and *Tingis* [= *Corythuca*] *ciliata*.
201. [WALSH, B. D.] [Apple-tree insects.] <Pract. Ent., January, 1867, v. 2, p. 47.  
 Answer to inquiry of M. Hobart; increasing distribution of *Aspidiotus conchiformis* [= *Mytilasptis pomorum*]; enemies of the same; characters of the eggs of *Aphis mali*.
202. [WALSH, B. D.] [Work in entomology.] <Pract. Ent., January, 1867, v. 2, p. 47.  
 Answer to G. Scarborough; advice for the study of entomology by beginners.
203. W[ALSH], B. D. The true *Thrips* and the bogus *Thrips*. <Pract. Ent., February, 1867, v. 2, pp. 49-52, figs.  
 Natural history, characters, habits, and figures of *Thrips* sp.; characters of the larva and imago of *Haltica chalybea*; figure of imago; habits of species of *Erythroneura* [= *Typhlocyba*]; description and figures of *E.* [= *T.*] *vitis*.
204. W[ALSH], B. D. Universal remedies. <Pract. Ent., 1867, v. 2, p. 52.  
 Exposure of proposed universal remedy against fruit-tree insects.
205. W[ALSH], B. D. Poisoning noxious insects. <Pract. Ent., February, 1867, v. 2, pp. 52-53.  
 Sugaring with poison as a means against *Noctuida*.

206. W[ALSH], B. D. Remarks by B. D. W. <Pract. Ent., February, 1867, v. 2, p. 54.  
Comments on S. S. Rathvon's "Bag-worms" (Pract. Ent., pp. 53-54); distribution and food-plants of *Thyridopteryx ephemeraformis*.
207. W[ALSH], B. D. Habits of the tree-cricket (*Ecanthus niveus*). <Pract. Ent., February, 1867, v. 2, p. 54, figs.  
Characters of eggs and method of deposition; characters, food-habits, and figures of the imago.
208. [WALSH, B. D.] Importing European parasites. <Pract. Ent., February, 1867, v. 2, pp. 54-55.  
Imaginary correspondence between Asa Fitch and John Curtis on the importation of parasitic insects.
209. [WALSH, B. D.] [Screw-worm.] <Pract. Ent., February, 1867, v. 2, p. 55.  
Answer to inquiry of L. D. Morse; undetermined larva found in osage-orange seed; hominivorous habits of *Lucilia macellaria*.
210. [WALSH, B. D.] [*Attacus cecropia*.] <Pract. Ent., February, 1867, v. 2, p. 55.  
Answer to inquiry of T. T. Smith; characters of larva and imago of *Attacus cecropia*; food-plants; method of issuance from cocoon; nature of fluid discharged when emerging from cocoon.
211. [WALSH, B. D.] [Apple-worm.] <Pract. Ent., February, 1867, v. 2, pp. 55-56.  
Answer to inquiry of W. C. Fish; characters of the pupa of *Sciara mali*.
212. [WALSH, B. D.] [Oak-gall.] <Pract. Ent., February, 1867, v. 2, p. 56.  
Answer to inquiry of W. Muir; characters of an undetermined cynipid gall on oak.
213. [WALSH, B. D.] [*Cicada*: Grape-vine *Procris*.] <Pract. Ent., February, 1867, v. 2, p. 56.  
Answer to inquiry of M. S. Hill; variations in the imago of *Cicada* [= *Tibicen*] *septendecim* and in the song of the same; characters of the larva of *Procris* [= *Harrisina*] *americana*.
214. [WALSH, B. D.] [*Nitidulidæ*.] <Pract. Ent., February, 1867, v. 2, p. 56.  
Answer to inquiry of W. H. S.; food-habits of *Ips fasciatus* and *Nitidula bipustulata*.
215. [WALSH, B. D.] [Turnip enemy.] <Pract. Ent., February, 1867, v. 2, p. 56.  
Answer to inquiry of F. T. Pember; characters and food-habits of *Polydesmus complanatus*.
216. [WALSH, B. D.] [Wheat midge.] <Pract. Ent., February, 1867, v. 2, p. 57.  
Answer to inquiry of C. P. Wickersham; nature of the membrane enveloping the full-grown larva of *Diplosis tritici*.

217. [WALSH, B. D.] [Queries answered.] <Pract. Ent., February, 1867, v. 2, p. 57.

Answer to inquiry of R. Middleton; toads, frogs, and spiders beneficial; effects of the stings of various insects.

218. [WALSH, B. D.] [Scales.] <Pract. Ent., February, 1867, v. 2, p. 57.

Answer to inquiry of M. M. S.; characters and ravages of scales on oleander and orange; means against *Coccidæ*.

219. [WALSH, B. D.] [Hundred-legged worm.] <Pract. Ent., February, 1867, v. 2, p. 57.

Answer to inquiry of S. P. Monks; identification of *Polydesmus virginienensis*; distinctive characters of Myriapoda.

220. [WALSH, B. D.] [Bark-borers.] <Pract. Ent., February, 1867, v. 2, pp. 57-58.

Answer to inquiry of C. V. Riley; synoptic table and food-habits of several species of *Scolytus*; descriptions of *S. fagi* n. sp. and *S. caryæ* n. sp. [= *4-spinosus*].

221. [WALSH, B. D.] [Aleurodes.] <Pract. Ent., February, 1867, v. 2, p. 58.

Answer to inquiry of D. F. C.; characters and food-plants of an undescribed species of *Aleurodes*.

222. W[ALSH], B. D. The critic criticized. <Pract. Ent., February, 1867, v. 2, p. 58. Answer [by C. V. Riley]. <Prairie Farmer, 16 March, 1867, [v. 35], n. s., v. 19, p. 169. S.-b., No. 2, p. 58. Criticism of article by C. V. Riley (Prairie Farmer, 19 January, 1867, [v. 35], n. s., v. 19, p. 37).

223. [WALSH, B. D.] Obituary. <Pract. Ent., February, 1867, v. 2, p. 58.

Notice of the late Brackenridge Clemens.

224. W[ALSH], B. D. Wire-worms. <Pract. Ent., March, 1867, v. 2, pp. 61-62, figs.

Characters of Myriapoda and larvæ of *Elateridæ*, popularly called wire-worms; food-habits of larva of *Ludius attenuatus*; figure of larva and imago of the same; confusion caused by the use of the term "wire-worms" by correspondents of the Country Gentleman.

225. W[ALSH], B. D. Imported insects.—The onion-fly. <Pract. Ent., March, 1867, v. 2, p. 64, figs.

Figures of larva and imago of *Anthomyia ceparum* and of *Oritalis* [= *Tritoxa*] *flexa*; comparative characters of imagos; distribution and means against the two species.

226. W[ALSH], B. D. [Means against cut-worms.] <Pract. Ent., March, 1867, v. 2, p. 66.

Recommends, in reply to J. Townley's inquiry, sugaring with poisoned molasses as a means against cut-worms.

227. W[ALSH], B. D. Entomology indeed run mad. <Pract. Ent., March, 1867, v. 2, pp. 66, 67.

Reprint of "The bud-worm" (N. C. Rural Journ., September, 1866), with criticism and correction of some of the errors.

228. W[ALSH], B. D. The imported gooseberry saw-fly. <Pract. Ent., March, 1867, v. 2, p. 67.

Reason for re-appearance in June and for the non-appearance of the second brood of *Nematus ventricosus* [= *ribesii*] in New York in 1866.

229. W[ALSH], B. D. Tree cut-worms. <Pract. Ent., March, 1867, v. 2, p. 67.

Cut-worm described (Pract. Ent., v. 1, pp. 85-86) identified as *Hadena chenopodii* [= *Mamestra trifoli*]. See Nos. 85, 281.

230. W[ALSH], B. D. Doctoring fruit trees again. <Pract. Ent., March, 1867, v. 2, pp. 67, 68.

Extract from Industrial Gazette, 15 December, 1866, with criticism; calomel, sulphur, and substances insoluble in water not absorbed into the circulation of trees.

231. W[ALSH], B. D. The grape-vine *Colaspis* (*Colaspis flavida* Say). <Pract. Ent., March, 1867, v. 2, pp. 68-69, fig.

Ravages of *Colaspis flavida*; comparison with allied species; remarks on the law of priority and on certain insects becoming suddenly injurious; figures *C. flavida*.

232. W[ALSH], B. D. Another universal remedy. <Pract. Ent., March, 1867, v. 2, p. 69.

Extract from reprint (!) in Cultivator and Country Gentleman, 10 January, 1867, with criticism of proposed remedy against insects injurious to trees.

233. W[ALSH], B. D. Borers. The plug-ugly theory. <Pract. Ent., March, 1867, v. 2, p. 69.

Criticism of theory that a plug driven into a hole in a tree is death to borers.

234. W[ALSH], B. D. A mass of mistakes. <Pract. Ent., March, 1867, v. 2, p. 70.

Correction of errors in "Remedy for the borer" (Prairie Farmer, 9 February, 1867).

235. W[ALSH], B. D. Hop-growing in the West. <Pract. Ent., March, 1867, v. 2, p. 70.

Extract from Country Gentleman, 31 January, 1867, showing ravages of *Phorodon humuli* in Vermont; danger of its introduction into the Western States.

236. W[ALSH], B. D. Thousand-legged worms. <Pract. Ent., March, 1867, v. 2, p. 70.

Extract from letter of J. H. Parsons, with comments; injuries to onions by *Iulus multistriatus* [= *Cambala annulata*]; *I. multistriatus* undistinguishable from *I. caeruleo-cinctus*.

237. W[ALSH], B. D. Fighting the Curculio. <Pract. Ent., March, 1867, v. 2, p. 71.  
Extract from Genesee Farmer for 1853, p. 125; ridicule of additions to "jar-ring" as a means against *Conotrachelus nemophar*.
238. W[ALSH], B. D. ["Bushels of butterflies."] <Pract. Ent., March, 1867, v. 2, p. 71.  
Extract from Cincinnati Gazette, August, 1866, with comments; occurrence of dead imagoes of *Attacus cecropia*? in large numbers ("10 bushels") in Newport, Ohio; food-plants of the larva.
239. [WALSH, B. D.] [Scab on potato.] <Pract. Ent., March, 1867, v. 2, pp. 71-72.  
Answer to inquiry of T. L. J. Baldwin; account of blister-like scabs on potatoes, probably caused by *Sciara* sp.; means against the same.
240. [WALSH, B. D.] [Mass of eggs.] <Pract. Ent., March, 1867, v. 2, p. 72.  
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241. [WALSH, B. D.] [Food of katydids.] <Pract. Ent., March, 1867, v. 2, p. 72.  
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242. [WALSH, B. D.] [Caterpillar nest on wild cherry.] <Pract. Ent. March, 1867, v. 2, p. 72.  
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243. [WALSH, B. D.] [Insect eggs.] <Pract. Ent., March, 1867, v. 2, p. 72.  
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244. [WALSH, B. D.] [*Attacus polyphemus*, etc.] <Pract. Ent., March, 1867, v. 2, pp. 72-73.  
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245. [WALSH, B. D.] [*Cossus robinia*, etc.] <Pract. Ent., March, 1867, v. 2, p. 73.  
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246. [WALSH, B. D.] [Museum pests.] <Pract. Ent., March, 1867, v. 2, p. 73.  
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247. [WALSH, B. D.] [Katydid eggs.] <Pract. Ent., March, 1867, v. 2, p. 73.  
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248. [WALSH, B. D.] [Squash-vine borer.] <Pract. Ent., March, 1867, v. 2, p. 73.  
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249. [WALSH, B. D.] [Apple-twig borers, etc.] <Pract. Ent., March, 1867, v. 2, pp. 73-74.  
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250. [WALSH, B. D.] [Hessian fly.] <Pract. Ent., March, 1867, v. 2, p. 74.  
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251. [WALSH, B. D.] [Tree-cricket.] <Pract. Ent., March, 1867, v. 2, p. 74.  
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252. [WALSH, B. D.] [Tineids in bee-hives.] <Pract. Ent., March, 1867, v. 2, p. 74.  
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253. W[ALSH], B. D. Jumping to conclusions. <Pract. Ent., March, 1867, v. 2, p. 74.  
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256. W[ALSH], B. D. Confessing the corn. <Pract. Ent., April, 1867, v. 2, p. 82.  
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257. [WALSH, B. D.] [*Bibio albipennis*.] <Pract. Ent., April, 1867, v. 2, p. 83.  
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258. [WALSH, B. D.] [Lice on horses.] <Pract. Ent., April, 1867, v. 2, p. 83.  
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259. [WALSH, B. D.] [Cocoon on wild cherry.] <Pract. Ent., April, 1867, v. 2, p. 83.

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260. [WALSH, B. D.] [Lepidopterous case-bearer.] <Pract. Ent., April, 1867, v. 2, p. 83.

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261. [WALSH, B. D.] [“Thousand-legged worms.”] <Pract. Ent., April, 1867, v. 2, p. 83.

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262. [WALSH, B. D.] [Toads: Glorified squash-bug.] <Pract. Ent., 1867, v. 2, p. 83.

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263. [WALSH, B. D.] [Galls on blackberry.] <Pract. Ent., April, 1867, v. 2, pp. 83-84.

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264. [WALSH, B. D.] [Bark-lice.] <Pract. Ent., April, 1867, v. 2, p. 84.

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265. [WALSH, B. D.] [Plant-lice.] <Pract. Ent., April, 1867, v. 2, p. 84.

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266. [WALSH, B. D.] [Bag-worms.] <Pract. Ent., April, 1867, v. 2, pp. 84-85.

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267. [WALSH, B. D.] [Insects injurious to grape.] <Pract. Ent., April, 1867, v. 2, p. 85.

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268. [WALSH, B. D.] [*Attacus promethea*.] <Pract. Ent., April, 1867, v. 2, p. 85.

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269. [WALSH, B. D.] [Borer in hickory.] <Pract. Ent., April, 1867, v. 2, p. 85.

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270. [WALSH, B. D.] [Apple-tree plant-lice.] <Pract. Ent., April, 1867, v. 2, p. 85.

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271. [WALSH, B. D.] [Tulip-tree bark-louse: Basket-worm.] <Pract. Ent., April, 1867, v. 2, p. 85.  
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287. [WALSH, B. D.] [*Attacus cecropia*.] <Pract. Ent., May, 1867, v. 2, p. 96.  
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288. [WALSH, B. D.] [Twig pruners.] <Pract. Ent., May, 1867, v. 2, p. 96.  
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293. W[ALSH], B. D. The new or Colorado potato-bug. <Pract. Ent., June, 1867, v. 2, pp. 101-102.  
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294. [WALSH, B. D.] [Gall-flies; saw-flies.] <Pract. Ent., June, 1867, v. 2, pp. 102-103.  
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295. [WALSH, B. D.] [Bark-beetles.] <Pract. Ent., June, 1867, v. 2, p. 103.  
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296. [WALSH, B. D.] [Apple-tree insects.] <Pract. Ent., June, 1867, v. 2, p. 103.  
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297. [WALSH, B. D.] [*Attacus cecropia*.] <Pract. Ent., June, 1867, v. 2, p. 103.  
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298. [WALSH, B. D.] [Grape-vine flea-beetle.] <Pract. Ent., June, 1867, v. 2, p. 103.  
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299. [WALSH, B. D.] [*Sphyræcephala brevicornis*.] <Pract. Ent., June, 1867, v. 2, p. 103.  
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301. [WALSH, B. D.] [Blister-beetles: plant-louse enemy.] <Pract. Ent., June, 1867, v. 2, p. 104.  
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302. [WALSH, B. D.] [Blackberry borers.] <Pract. Ent., June, 1867, v. 2, p. 104.  
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303. W[ALSH], B. D. Scientific nomenclature. <Pract. Ent., July, 1867, v. 2, pp. 105-106. .

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305. [WALSH, B. D.] [*Lucanus elaphus*.] <Pract. Ent., July, 1867, v. 2, p. 107.

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306. [WALSH, B. D.] [New York weevil.] <Pract. Ent., July, 1867, v. 2, p. 107.

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307. [WALSH, B. D.] [Codling-moth.] <Pract. Ent., July, 1867, v. 2, p. 107.

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308. [WALSH, B. D.] [Hickory borer, etc.] <Pract. Ent., July, 1867, v. 2, p. 107.

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309. [WALSH, B. D.] [Wasps.] <Pract. Ent., July, 1867, v. 2, p. 107.

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310. [WALSH, B. D.] [Parasitic flies, etc.] <Pract. Ent., July, 1867, v. 2, pp. 107-108.

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311. [WALSH, B. D.] [Workers among Hymenoptera.] <Pract. Ent., July, 1867, v. 2, p. 108.

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312. [WALSH, B. D.] [Cut-worms.] <Pract. Ent., July, 1867, v. 2, p. 108.

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313. [WALSH, B. D.] [Potato-beetle enemies.] <Pract. Ent., July, 1867, v. 2, p. 108.

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314. [WALSH, B. D.] [Black-bug.] <Pract. Ent., July, 1867, v. 2, p. 108.

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- [WALSH, B. D.] [Burying-beetles.] <Pract. Ent., July, 1867, v. 2, p. 108.

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316. [WALSH, B. D.] [Insects named.] <Pract. Ent., July, 1867, v. 2, p. 108.

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317. [WALSH, B. D.] [Spring-tails.] <Pract. Ent., July, 1867, v. 2, pp. 108-109.

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318. [WALSH, B. D.] [Blackberry gall insects.] <Pract. Ent., July, 1867, v. 2, p. 109.

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319. [WALSH, B. D.] [Pine and cedar longicorns.] <Pract. Ent., July, 1867, v. 2, p. 109.

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320. [WALSH, B. D.] [White-pine plant-louse, etc.] <Pract. Ent., July, 1867, v. 2, p. 109.

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321. [WALSH, B. D.] [Cut-worms.] <Pract. Ent., July, 1867, v. 2, p. 109.

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322. [WALSH, B. D.] [Currant plant-louse.] <Pract. Ent., July, 1867, v. 2, pp. 109, 110.

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323. [WALSH, B. D.] [Beetles.] <Pract. Ent., July, 1867, v. 2, p. 110.

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324. [WALSH, B. D.] Fertilizing plants. <Pract. Ent., July, 1867, v. 2, p. 110.

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325. [WALSH, B. D.] The peach-worm. <Pract. Ent., July, 1867, v. 2, p. 110.

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326. W[ALSH], B. D. Valedictory. <Pract. Ent., August-September, 1867, v. 2, p. 111.

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327. W[ALSH], B. D. The State entomologist of Illinois. <Pract. Ent., August-September, 1867, v. 2, p. 111. Reprint: <Can. Farmer, 1 October, 1867, v. 4. S.-b., No. 2, p. 98.

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328. W[ALSH], B. D. The three so-called army-worms. <Pract. Ent., August-September, 1867, v. 2, pp. 111-114.

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329. W[ALSH], B. D. The little Turk and its crescent. <Pract. Ent., August-September, 1867, v. 2, pp. 114-115.

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330. [WALSH, B. D.] Apple-worm. (*Carpocapsa pomonella*.) <Pract. Ent., August-September, 1867, v. 2, p. 115.

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331. W[ALSH], B. D. Spindle-worms. <Pract. Ent., August-September, 1867, v. 2, pp. 115-116.

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332. W[ALSH], B. D. A plant growing out of an insect. <Pract. Ent., August-September, 1867, v. 2, p. 116.

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333. [WALSH, B. D.] The imported gooseberry saw-fly. <Pract. Ent., August-September, 1867, v. 2, p. 116.

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334. W[ALSH], B. D. The Colorado potato-bug. <Pract. Ent., August-September, 1867, v. 2, p. 116.

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335. W[ALSH], B. D. Apple-tree plant-lice. (*Aphis mali*.) <Pract. Ent., August-September, 1867, v. 2, pp. 116-117.

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336. W[ALSH], B. D. The tent-caterpillar of the apple-tree. (*Clisiocampa americana*.) <Pract. Ent., August-September, 1867, v. 2, p. 117.

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337. [WALSH, B. D.] A new foe of the corn. <Pract. Ent., August-September, 1867, v. 2, pp. 117-118.  
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338. [WALSH, B. D.] [*Rhyssa atrata*.] <Pract. Ent., August-September, 1867, v. 2, p. 118.  
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339. [WALSH, B. D.] [Grape-vine beetles.] <Pract. Ent., August-September, 1867, v. 2, p. 118.  
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340. [WALSH, B. D.] [Currant insects.] <Pract. Ent., August-September, 1867, v. 2, p. 118.  
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341. [WALSH, B. D.] [Rascal leaf-crumpler.] <Pract. Ent., August-September, 1867, v. 2, p. 118.  
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342. [WALSH, B. D.] [Strawberry enemy.] <Pract. Ent., August-September, 1867, v. 2, p. 118.  
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U. S. DEPARTMENT OF AGRICULTURE.  
DIVISION OF ENTOMOLOGY.

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BIBLIOGRAPHY  
OF  
THE MORE IMPORTANT CONTRIBUTIONS  
TO  
AMERICAN ECONOMIC ENTOMOLOGY.

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PREPARED, BY AUTHORITY OF THE SECRETARY OF AGRICULTURE,

BY

SAMUEL HENSHAW.

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PART II.

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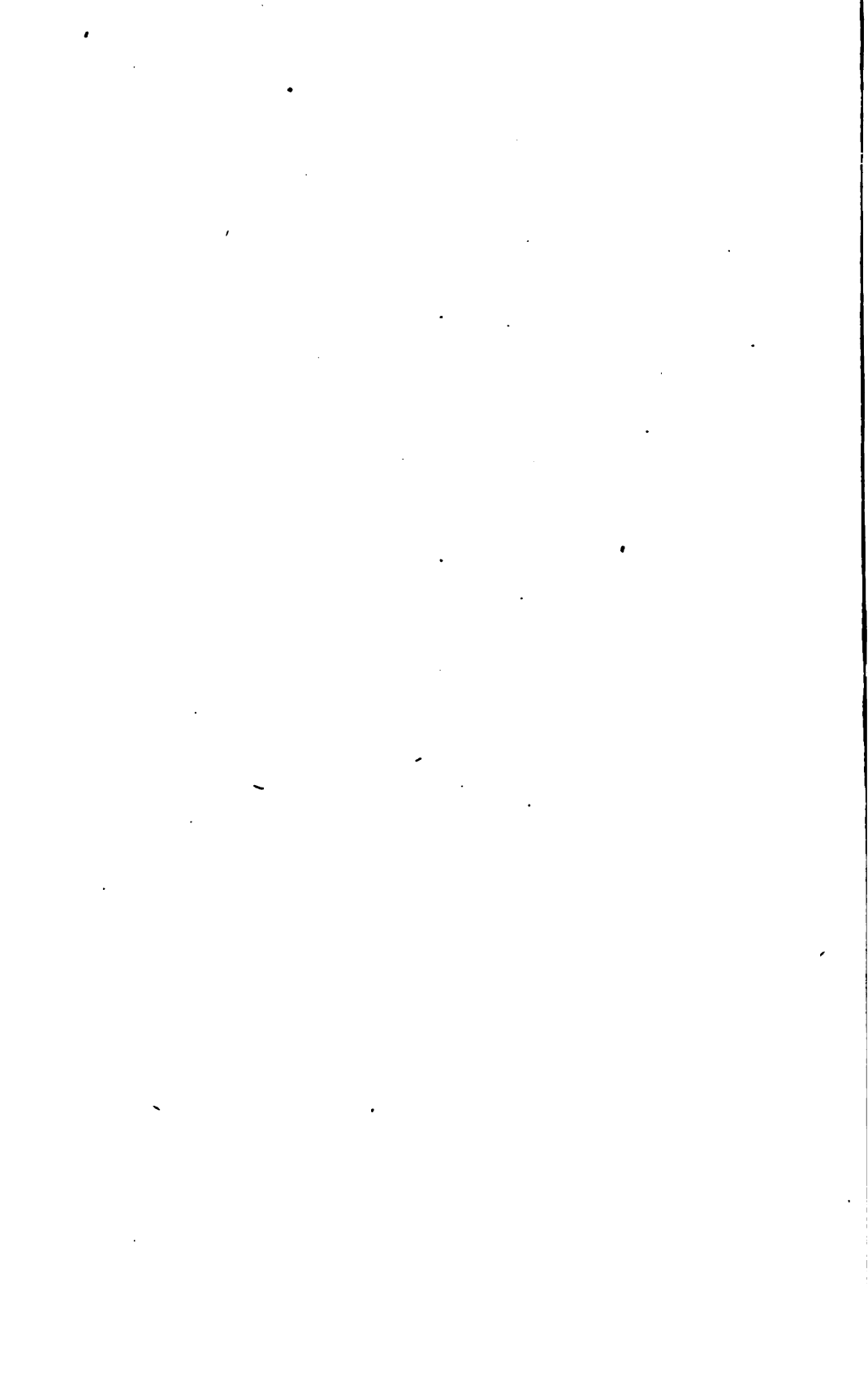
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407. [WALSH, B. D., and C. V. RILEY.] The sting of the 17-year Cicada. <Amer. Ent., October, 1868, v. 1, pp. 36-37.  
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408. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., October, 1868, v. 1, p. 37.  
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409. [WALSH, B. D., and C. V. RILEY.] Squash-bug; its change of color. <Amer. Ent., October, 1868, v. 1, p. 37.  
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410. [WALSH, B. D., and C. V. RILEY.] White grub; immunity from it next year in Clinton County, Mo. <Amer. Ent., October, 1868, v. 1, p. 37.  
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411. [WALSH, B. D., and C. V. RILEY.] Insect enemies of the Colorado potato beetle. <Amer. Ent., October, 1868, v. 1, p. 37.  
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412. [WALSH, B. D., and C. V. RILEY.] "Harvest-bugs" in America, misnamed "jiggers." <Amer. Ent., October, 1868, v. 1, p. 38.  
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413. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., October, 1868, v. 1, p. 38.  
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414. [WALSH, B. D., and C. V. RILEY.] Grapes cut off by the tree cricket. <Amer. Ent., October, 1868, v. 1, p. 38, fig. 30-31.  
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415. [WALSH, B. D., and C. V. RILEY.] The Buffalo tree-hopper.  
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416. [WALSH, B. D., and C. V. RILEY.] A scavenger mistaken for a foe. <Amer. Ent., October, 1868, v. 1, p. 38.  
 Answer to inquiry of Simmons and Tillson; characters and habits of the larva of *Copris carolina*.
417. [WALSH, B. D., and C. V. RILEY.] Insect foes of the bark-louse.  
 <Amer. Ent., October, 1868, v. 1, p. 39, fig. 32.  
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418. [WALSH, B. D., and C. V. RILEY.] Best works on entomology.  
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419. [WALSH, B. D., and C. V. RILEY.] Larvæ in plum-gum. <Amer. Ent., October, 1868, v. 1, p. 39.  
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420. [WALSH, B. D., and C. V. RILEY.] Insect foes of the hop vine.  
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421. [WALSH, B. D., and C. V. RILEY.] Insect foe of the apple-tree borer. <Amer. Ent., October, 1868, v. 1, p. 39.  
 Answer to inquiry of J. E. Walker; undetermined carabid larva preying upon larva of *Saperda candida*.
422. [WALSH, B. D., and C. V. RILEY.] Oak tree caterpillars. <Amer. Ent., October, 1868, v. 1, p. 39.  
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423. [WALSH, B. D., and C. V. RILEY.] Bark-lice on apple trees.  
 <Amer. Ent., October, 1868, v. 1, p. 40.  
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424. [WALSH, B. D., and C. V. RILEY.] The "saddle-back" caterpillar. <Amer. Ent., October, 1868, v. 1, p. 40.  
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425. [WALSH, B. D., and C. V. RILEY.] The regal walnut caterpillar.  
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 Answer to inquiry of M. Copley; characters and food-plants of larva of *Oitheronia regalis*; times of metamorphosis; characters of the imago.
426. [WALSH, B. D., and C. V. RILEY.] The Hessian fly. <Amer. Ent., October, 1868, v. 1, p. 40.  
 Answer to inquiry of F. D. Carson; ravages of *Cecidomyia destructor*; late sowing as a means of avoiding the same.

427. [WALSH, B. D., and C. V. RILEY.] Red cedar caterpillar. <Amer. Ent., October, 1868, v. 1, p. 40.  
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428. [WALSH, B. D., and C. V. RILEY.] Wheat-midge winter killed. <Amer. Ent., October, 1868, v. 1, p. 40.  
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429. [WALSH, B. D., and C. V. RILEY.] Grape-vine borer. <Amer. Ent., October, 1868, v. 1, p. 40.  
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430. [WALSH, B. D., and C. V. RILEY.] Popular names and scientific names. <Amer. Ent., November, 1868, v. 1, p. 49, figs. 49-51.  
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431. [WALSH, B. D., and C. V. RILEY.] Entomological ignorance in the North. <Amer. Ent., November, 1868, v. 1, pp. 50-51, figs. 52-54.  
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432. [WALSH, B. D., and C. V. RILEY.] Tit for tat. <Amer. Ent., November, 1868, v. 1, p. 52.  
Ridicule of an absurd entomological item.
433. [WALSH, B. D., and C. V. RILEY.] Grasshoppers. <Amer. Ent., November, 1868, v. 1, p. 53.  
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434. [WALSH, B. D., and C. V. RILEY.] To keep seed peas from bugs. <Amer. Ent., November, 1868, v. 1, p. 53.  
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435. [WALSH, B. D., and C. V. RILEY.] Mind how you pack insects. <Amer. Ent., November, 1868, v. 1, p. 54.  
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436. [WALSH, B. D., and C. V. RILEY.] The apple growing on a grape vine. <Amer. Ent., November, 1868, v. 1, p. 54.  
The "vegetable phenomenon," see Nos. 332, 403, 478, proved to be a gall.
437. [WALSH, B. D., and C. V. RILEY.] The late exhibition of useful and destructive insects at Paris. <Amer. Ent., November, 1868, v. 1, p. 55.  
Notice of the formation of the Société d'Insectologie Agricole at Paris, and of the second exhibition of the society.
438. [WALSH, B. D., and C. V. RILEY.] Destroying black ants in gardens. <Amer. Ent., November, 1868, v. 1, p. 55.  
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439. [WALSH, B. D., and C. V. RILEY.] Entomological quackery.  
 <Amer. Ent., November, 1868, v. 1, p. 56.  
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 means against *Conotrachelus nenuphar*.
440. [WALSH, B. D., and C. V. RILEY.] The cruel bug-hunters. <Amer.  
 Ent., November, 1868, v. 1, p. 56.  
 Insects are not susceptible of such feelings of pain and pleasure as are felt  
 by higher animals.
441. [WALSH, B. D., and C. V. RILEY.] Honey bees eating grapes.  
 <Amer. Ent., November, 1868, v. 1, p. 56.  
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442. [WALSH, B. D., and C. V. RILEY.] Twigs amputated by some  
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443. [WALSH, B. D., and C. V. RILEY.] Twigs girdled by some ani-  
 mal. <Amer. Ent., November, 1868, v. 1, p. 57.  
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444. [WALSH, B. D., and C. V. RILEY.] Hop-vine caterpillar. <Amer.  
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 Answer to inquiry of H. J. Dunlap; larva of *Grapta interrogationis* feeding  
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445. [WALSH, B. D., and C. V. RILEY.] "Galls" on leaves of soft maple.  
 <Amer. Ent., November, 1868, v. 1, p. 57.  
 Answer to inquiry of A. L. Child; characters of undescribed mite-galls and  
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446. [WALSH, B. D., and C. V. RILEY.] Unsightly galls on the cot-  
 tonwood. <Amer. Ent., November, 1868, v. 1, p. 57.  
 Answer to inquiry of A. L. Child; character of galls made by *Pemphigus va-*  
*gabondus* and *P. populicaulis*; their effects upon the cottonwood and means  
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447. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent.,  
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 Answer to inquiry of E. Baxter; *Gordius aquaticus* a host in *Orcelimum*  
*gracile*; *Cetonia* [= *Euphoria*] *inda* destructive to the peach.
448. [WALSH, B. D., and C. V. RILEY.] The stick-bug. <Amer. Ent.,  
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 uary, 1870.  
 Description, vernacular names, and habits of *Spectrum* [= *Diapheromera*]  
*femorata*.
449. [WALSH, B. D., and C. V. RILEY.] Woolly lice on the beech.  
 <Amer. Ent., November, 1868, v. 1, p. 58.  
 Answer to inquiry of F. H. Guiwite; habits and food-plants of *Pemphigus*  
*imbricator*.

450. [WALSH, B. D., and C. V. RILEY.] The sheep-bot or head-maggot. <Amer. Ent., November, 1868, v. 1, p. 58.  
Answer to inquiry of R. W. Scott; *Cestrus ovis* ordinarily oviparous; sometimes the eggs hatch prematurely inside the body.
451. [WALSH, B. D., and C. V. RILEY.] Leaf-miners of the locust. <Amer. Ent., November, 1868, v. 1, p. 58.  
Answer to inquiry of R. W. Scott; characters, habits, ravages, and means against *Hissa scutellaris* [= *Odontota dorsalis*].
452. [WALSH, B. D., and C. V. RILEY.] Leaf-hoppers on celery. <Amer. Ent., November, 1868, v. 1, p. 58.  
Answer to inquiry of R. Parnell; mention of two undescribed *Tettigonidae* infesting early celery.
453. [WALSH, B. D., and C. V. RILEY.] Parsnip caterpillars.—Scorpions. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of F. Brewer; food-plants of larva of *Papilio asterias*; habits of the imago; habits and sting of *Buthus carolinianus*; its occurrence in Missouri.
454. [WALSH, B. D., and C. V. RILEY.] Noxious insects named. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of J. H. Parsons; larval characters and food-plants of *Hyphantria textor* [= *cunea*], *Notodonta* [= (*Edemasia*) *concinna*, *Arctia* [= *Spilosoma*] *virginica*, *Carpocapsa pomonella*, and of *Trypeta pomonella*.
455. [WALSH, B. D., and C. V. RILEY.] Cut-worms destroying recently sown wheat. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of T. R. Allen; characters, habits, and means against undetermined *Noctuidæ* attacking wheat.
456. [WALSH, B. D., and C. V. RILEY.] The spined soldier bug. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of I. Hicks; *Podisus spinosus* as an enemy of *Hyphantria textor* [= *cunea*].
457. [WALSH, B. D., and C. V. RILEY.] The preying Mantis, alias Devil's riding horse, etc. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of A. Pettit; habits of *Mantis* [= *Phasmomantis*] *carolina*; egg-mass of the same.
458. [WALSH, B. D., and C. V. RILEY.] The pigeon Tremex. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of F. Brewer; characters of *Tremex columba*; food-habits and parasites of its larva.
459. [WALSH, B. D., and C. V. RILEY.] Flesh-worms. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of W. J. Stuart; larval habits of an undetermined muscid.
460. [WALSH, B. D., and C. V. RILEY.] Fall web-worm on hickory. <Amer. Ent., November, 1868, v. 1, p. 59.  
Answer to inquiry of W. W. Daniels; transformation of *Hyphantria textor* [= *cunea*]; characters of its larva and imago.



461. [WALSH, B. D., and C. V. RILEY.] Butterflies named. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of W. W. Butterfield; characters of *Colias philodice*, *Vanessa* [= *Grapta*] *comma*, and *Danaus archippus*.
462. [WALSH, B. D., and C. V. RILEY.] Museum pest. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of T. W. Holt, jr.; means against *Dermeestidae*.
463. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of J. Weed; enemies of plant-lice and bark-lice; food-plant and characters of the larva of *Papilio turnus*.
464. [WALSH, B. D., and C. V. RILEY.] Grapes spoiled by something. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of J. Wood; grapes injured from some unknown cause; juice from wounded grapes as food for moths.
465. [WALSH, B. D., and C. V. RILEY.] White-pine worms. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of J. T. Little; food-plants of larva of *Lophyrus abbotii*; transformations of the same.
466. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of J. Bell; manner in which *Pompilus* [= *Pepsis*] *formosa* prepares *Mygale hentzii* for food for its larva.
467. [WALSH, B. D., and C. V. RILEY.] Insect foes of the apple-tree. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of G. C. Brackett; characters of larva of *Carpocapsa pomonella*; means against *Datana ministra* and *Pemphigus pyri* [= *Schizoneura lanigera*].
468. [WALSH, B. D., and C. V. RILEY.] Grape-leaf folders eaten by spiders. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of A. A. Hilliard; larva of *Desmia maculalis* destroyed by a spider.
469. [WALSH, B. D., and C. V. RILEY.] Caterpillar of the Troilus butterfly. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of A. S. Fuller; food-habits of larva of *Papilio troilus*.
470. [WALSH, B. D., and C. V. RILEY.] Potato beetles. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of P. H. Foster; identification of *Epicauta vittata* and *Macrobasis unicolor* as enemies of the potato.
471. [WALSH, B. D., and C. V. RILEY.] Holes round the roots of young ash trees in the nursery. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of I. Hicks; characters and food-habits of the larva of *Xyloryctes satyrus*.
472. [WALSH, B. D., and C. V. RILEY.] Locust borers. <Amer. Ent., November, 1868, v. 1, p. 60.  
Answer to inquiry of U. Bruner; destructiveness of the larva of *Clytus* [= *Cyllene*] *robiniae*.

473. [WALSH, B. D., and C. V. RILEY.] The hellgrammite fly. <Amer. Ent., December, 1868, v. 1, pp. 61-62, figs. 56-57.  
Habits of *Corydalus cornutus*; figures the larva, pupa, and imago; description and figure of the eggs of *Belostoma americanum* mistaken for those of *Corydalus*.
474. [WALSH, B. D., and C. V. RILEY.] The periodical Cicada. <Amer. Ent., December, 1868, v. 1, pp. 63-72, figs. 58-64. Extract: <Op. cit., June, 1869, v. 1, p. 202.  
Characterization of the 13-year brood of *Cicada* as a new species, *C. [= Tibicen] tredecim*; dimorphism of the same and of *C. [= T.] septendecim*; seasons, natural history, transformations, enemies, sting, and injuries of these species; chronological history of their several known broods; figures the several stages of *C. [= T.] septendecim*, the towers made by the pupa and twigs with eggs.
475. [WALSH, B. D., and C. V. RILEY.] The hateful or Colorado grasshopper, *Caloptenus spretus*, Uhler and Walsh. <Amer. Ent., December, 1868, v. 1, pp. 73-76, fig. 65.  
Comparative characters and figures of *Caloptenus spretus* and *C. femur-rubrum*; native habitat, migrations, distribution, and ravages of the former; harmlessness of its second generation in the Mississippi Valley as compared with the first generation; improbability that it will ever become a permanent resident in that region.
476. [WALSH, B. D., and C. V. RILEY.] The twig-girdler, *Oncideres cingulatus*, Say. <Amer. Ent., December, 1868, v. 1, pp. 76-77, fig. 66.  
Oviposition and food habits of *Oncideres cingulata*; figure of imago and of amputated twig.
477. [WALSH, B. D., and C. V. RILEY.] An Ichneumon fly mistaken for a wasp. <Amer. Ent., December, 1868, v. 1, p. 77.  
Review of paper in *Christian Advocate* on "The stiletto wasp"; *Pimpla [= Thalassia] atrata* probably mistaken for a wasp.
478. [WALSH, B. D., and C. V. RILEY.] A plant growing out of an insect. <Amer. Ent., December, 1868, v. 1, p. 77.  
See Nos. 332, 403, 436; extract from *Sedalia Press*, with comments; larvæ of *Lachnosterna fusca* infested with *Cordyceps*; larvæ supposed to have eaten poisonous seed, which has germinated after killing the larvæ; sowing the seed as a means against the larvæ.
479. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., December, 1868, v. 1, p. 78.  
Notices of The butterflies of North America by W. H. Edwards.—The Canadian Entomologist.—Guide to the study of insects by A. S. Packard, jr.
480. [WALSH, B. D., and C. V. RILEY.] Eggs of the white-marked tussock moth. <Amer. Ent., December, 1868, v. 1, p. 79, fig. 67.  
Answer to inquiry of J. M. Hannah; characters of egg and larva of *Orgyia leucostigma*; sexual differences; parasites; figure of the larva.
481. [WALSH, B. D., and C. V. RILEY.] Currant borers. <Amer. Ent., December, 1868, v. 1, p. 79.  
Answer to inquiry of B. N. McKinstry; means against *Trochilium [= Aegeria] tipuliformis*, *T. [= Aloathæ] caudatum*, and *Psenocerus supernotatus*.

482. [WALSH, B. D., and C. V. RILEY.] Insect infesting grape seed. <Amer. Ent., December, 1868, v. 1, p. 79, fig. 68.  
Answer to inquiry of A. S. Fuller; characters and figure of larva of *Isosoma vitis* infesting grape seed.
483. [WALSH, B. D., and C. V. RILEY.] Museum pests again. <Amer. Ent., December, 1868, v. 1, p. 79.  
Answer to inquiry of J. Huggins; means against *Anthreni* in collections of natural history.
484. [WALSH, B. D., and C. V. RILEY.]\* Grape-vine leaf-hoppers. <Amer. Ent., December, 1868, v. 1, p. 79.  
Answer to inquiry of P. C. Holmes; means against grape-vine leaf-hoppers.
485. [WALSH, B. D., and C. V. RILEY.] Apple-tree borer. <Amer. Ent., December, 1868, v. 1, p. 80, fig. 69.  
Answer to inquiries of J. T. Zimmerman, C. H. Roberts, and C. R. Babbitt; habits, ravages, and figure of *Bostrichus* [= *Amphicercus*] *bicaudatus*.
486. [WALSH, B. D., and C. V. RILEY.] The murky ground beetle. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of E. T. Dale; food-habits and bombardier discharges of *Harpalus caliginosus*.
487. [WALSH, B. D., and C. V. RILEY.] Curculio and bark-lice. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of D. A. Compton; hibernation of *Conotrachelus nenuphar*; soft soap as a means against *Coccidæ*.
488. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of E. B. Beach; identification of several lepidopterous larvæ; food-habits of *Dryocampa stigma* and *D. pellucida* [= *virginiensis*].
489. [WALSH, B. D., and C. V. RILEY.] Young pecan trees girdled. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of Mann and Redmond; means against *Oncideres cingulata*.
490. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of E. T. Dale; identification of several Coleoptera; supposed food-habits of *Tragidion fulvipenne*; character of cocoons of two species of *Microgaster* infesting *Protoparce celeus*.
491. [WALSH, B. D., and C. V. RILEY.] Eggs of true bugs. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of S. C. Thornton; characters of eggs of *Prionidus cristatus*. See Amer. Ent., v. 1, pp. 96 and 187.
492. [WALSH, B. D., and C. V. RILEY.] Museum pest once more. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of G. M. L.; larvæ of *Anthrenus musæorum* injuring whale-bone, woolen goods, etc.
493. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas again. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of C. Peabody; distribution of *Mygale kentzii* in Missouri.

494. [WALSH, B. D., and C. V. RILEY.] The Hessian fly on seed wheat. <Amer. Ent., December, 1868, v. 1, p. 80.  
Answer to inquiry of U. Scott; broods and times of transformation of *Cecidomyia destructor*.
495. [WALSH, B. D., and C. V. RILEY.] The apple-root plant-louse. *Eriosoma (Pemphigus) pyri*, Fitch. <Amer. Ent., January, 1869, v. 1, pp. 81-84, figs. 70-72.  
Habits, ravages, description, enemies, and parasites of, and means against, *Eriosoma pyri* [= *Schizoneura lanigera*]; figures injured root, larva, and adult with details of structure; figures adult plant-louse found on cottonwood; description and figure of larva, puparium, and imago of *Pipiza radicum* n. sp.
496. [WALSH, B. D., and C. V. RILEY.] Ants' nests in gardens. <Amer. Ent., January, 1869, v. 1, p. 84.  
Means against ants.
497. [WALSH, B. D., and C. V. RILEY.] The parasites of the human animal. <Amer. Ent., January, 1869, v. 1, pp. 84-88, figs. 73-74.  
Brief accounts of *Pediculus humanus* [= *vestimenti*], *P. cervicalis* [= *capitis*], *P.* [= *Pthirus*] *pubis*, *Estrus* [= *Dermatobia*] *hominis*, *Pulex irritans*, *P.* [= *Sarcopteryx*] *penetrans*, *Acanthia lectularia*, *Conorhinus sanguisuga*, and *Acarus* [= *Sarcoptes*] *scabiei*; figures and habits of *Reduvius* [= *Opsicætes*] *personatus* and of *Pirates* [= *Rasahus*] *biguttatus*; figure of *Conorhinus sanguisuga*; classificatory relations of *Pediculina* and *Mallophaga*.
498. [WALSH, B. D., and C. V. RILEY.] The coffee borer. <Amer. Ent., January, 1869, v. 1, p. 88.  
Unnamed coffee borer injurious to coffee trees in Madras.
499. [WALSH, B. D., and C. V. RILEY.] Strawberry worms. <Amer. Ent., January, 1869, v. 1, pp. 89-91, figs. 75-76.  
Description, natural history, ravages, means against, and figures of larva and imago of *Anchylopera* [= *Phoxopteris*] *fragaria*, n. sp.; figures all stages of *Emphytus* [= *Harpiphorus*] *maculatus*; description of its larva and pupa, its natural history, and means against its ravages.
500. [WALSH, B. D., and C. V. RILEY.] Fungoid growths. <Amer. Ent., January, 1869, v. 1, pp. 91-92.  
Mention of instances of the growth of fungi on living plants and animals; letter of S. H. Y. Early on the occurrence of fungoid growths on the larvae of *Lachnosterna fusca*.
501. [WALSH, B. D., and C. V. RILEY.] Plums for the million. <Amer. Ent., January, 1869, v. 1, pp. 92-93.  
Means against *Conotrachelus nemophar*; notes on varieties of plum exempt from the attacks of the same.
502. [WALSH, B. D., and C. V. RILEY.] The "Colorado grasshopper." <Amer. Ent., January, 1869, v. 1, pp. 95-96.  
Answer to inquiries of W. N. Byers and V. Devinny; specific names indicating particular districts can not be changed because the insect is found in other regions.

503. [WALSH, B. D., and C. V. RILEY.] Universal remedies. <Amer. Ent., January, 1869, v. 1, p. 97.  
Criticism of an advertisement of "Best's patent fruit tree and vine invigorator."
504. [WALSH, B. D., and C. V. RILEY.] Complimentary. <Amer. Ent., January, 1869, v. 1, p. 98.  
Notices of several notices of the American Entomologist.
505. [WALSH, B. D., and C. V. RILEY.] Paper-makers. <Amer. Ent., January, 1869, v. 1, p. 98.  
Comparison of the manufacture of paper by man and by the *Vespida*.
506. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., January, 1869, v. 1, p. 98.  
Notices of L'Insectologie agricole—Cecil's books of natural history.
507. [WALSH, B. D., and C. V. RILEY.] Look out for the eggs of the apple-tree plant-louse. <Amer. Ent., January, 1869, v. 1, p. 99.  
Abundance of eggs of *Aphis mali* in winter of 1868-'69, in Missouri and Illinois; means against the same.
508. [WALSH, B. D., and C. V. RILEY.] Greenhouse plants [= pests]. <Amer. Ent., January, 1869, v. 1, p. 99.  
Means against *Aphidida*, *Coccidæ*, and *Tetranychus telarius*.
509. [WALSH, B. D., and C. V. RILEY.] How to hatch pupæ. <Amer. Ent., January, 1869, v. 1, p. 99.  
Answer to inquiry of D. P. Smith; methods of raising insects.
510. [WALSH, B. D., and C. V. RILEY.] Drug-store pests. <Amer. Ent., January, 1869, v. 1, p. 99.  
Answer to inquiry of J. M. Good; characters of larva of undetermined ptinid; food-habits of *Ptinus brunneus*; food-habits, characters, and means against *Calandra oryzae* and *C. granaria*. (See No. 551.)
511. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., January, 1869, v. 1, p. 99.  
Answer to inquiry of J. J. Thomas; habits, food-plants, and means against *Phycita nebulo* [= *Acrobasis indiginella*].
512. [WALSH, B. D., and C. V. RILEY.] Crane-fly larvæ. Amer. Ent., January, 1869, v. 1, p. 100.  
Answer to inquiries of R. D. Alexander and — Hickman; habits of *Tipula* sp.; food-habits of *T. trivittata*.
513. [WALSH, B. D., and C. V. RILEY.] Punctured grape canes. <Amer. Ent., January, 1869, v. 1, p. 100.  
Answer to inquiry of B. L. Kingsbury; description of punctures in grape canes probably caused by *Orocharis saltator*; means against tree-cricket.
514. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., January, 1869, v. 1, p. 100.  
Answer to inquiry of W. R. Marine; identification of several insects found in apple and peach nurseries.
515. [WALSH, B. D., and C. V. RILEY.] Supposed cause of yellows in peach trees. <Amer. Ent., January, 1869, v. 1, p. 100, fig. 77.  
Answer to inquiry of C. H. Roberts; yellows of peach-trees a vegetable disease; figure of healthy and diseased limb; affected trees more subject to the attacks of insects than healthy trees.

516. [WALSH, B. D., and C. V. RILEY.] Eggs of katydid. <Amer. Ent., January, 1869, v. 1, p. 100.  
Answer to inquiry of A. A. Hilliard; character of the eggs of *Platyphyllum* [= *Cyrtophyllum*] *concauus*.
517. [WALSH, B. D., and C. V. RILEY.] Apple-twig borer. <Amer. Ent., January, 1869, v. 1, p. 100.  
Answer to inquiry of J. T. Zimmerman; ravages of *Bostrichus* [= *Amphicerus*] *bicaudatus*.
518. [WALSH, B. D., and C. V. RILEY.] Galls and their architects. <Amer. Ent., February, 1869, v. 1, pp. 101-110, figs. 78-90.  
Definition, classification, and variation of galls; accounts of some galls made by *Cynipida*, *Cecidomyida*, and *Aphidida* and of the gall-makers; natural history, descriptions, and figures of *Cynips* [= *Amphidolips*] *q. spongifica*, *C. [= A.] q. inanis*, *C. [= A.] q. prunus* n. sp., *Cecidomyia s. strobiloides*, *C. s. brassicoides*, *C. v. pomum* n. sp., *C. v. coryloides* n. sp., *Pemphigus raga-bundus*, *P. rhois* and *Colopha ulmicola*; description of the imago of *Cynips q. prunus* and of *Pemphigus ulmifusus* n. sp., and of the larvæ of the new species of *Cecidomyia*; dimorphism of gall-makers; presence of inquiline and parasites in galls. (See No. 821.)
519. [WALSH, B. D., and C. V. RILEY.] The bogus Colorado potato-bug, *Doryphora juncta*, Germar. <Amer. Ent., February, 1869, v. 1, p. 110.  
Food-habits of *D. juncta*.
520. [WALSH, B. D., and C. V. RILEY.] Ants and aphides. <Amer. Ent., February, 1869, v. 1, p. 110.  
Inquiry of W. Batchelor, with answer; secretion of honey-dew by *Aphidida* and harvesting of the same by ants.
521. [WALSH, B. D., and C. V. RILEY.] The Tarantula of Texas, *Mygale hentzii*, Girard. <Amer. Ent., February, 1869, v. 1, p. 11, fig. 91.  
Figure of *Mygale hentzii*; habits of *Pompilus* [= *Pepsis*] *formosa*; quotes from G. Lincecum's "The Tarantula killers of Texas" (Amer. Nat., v. 1, pp. 137-141).
522. [WALSH, B. D., and C. V. RILEY.] The melancholy chafer. <Amer. Ent., February, 1869, v. 1, p. 111.  
Ravages and figure of the imago of *Euphoria melancholica*.
523. [WALSH, B. D., and C. V. RILEY.] Apple worms (*Carpocapsa pomonella*, Linn.). <Amer. Ent., February, 1869, v. 1, pp. 112-114, fig. 93.  
Natural history, ravages, and means against *Carpocapsa pomonella*; figures injured apple, larva, pupa, and imago.
524. [WALSH, B. D., and C. V. RILEY.] The asparagus beetle (*Crioceris asparagi*, Linn.). <Amer. Ent., February, 1869, v. 1, pp. 114-115, fig. 94.  
Introduction into the United States; natural history, ravages, parasites of, and means against *Crioceris asparagi*; figure of eggs, larvæ, and imago of the same.

525. [WALSH, B. D., and C. V. RILEY.] A popular delusion. <Amer. Ent., February, 1869, v. 1, p. 116.  
No insect passes through all the stages of its growth within one day; life history of *Ephemera*.
526. [WALSH, B. D., and C. V. RILEY.] The squirrel bot. <Amer. Ent., February, 1869, v. 1, p. 117.  
Comments on paper by S. S. Rathvon; emasculation of the striped squirrel by *Cuterebra buccata*.
527. [WALSH, B. D., and C. V. RILEY.] [Periodical Cicada.] <Amer. Ent., February, 1869, v. 1, p. 117.  
Comments on letter of R. H. Warder; oviposition of *Cicada* [= *Tibicen*] *septendecim* in evergreens.
528. [WALSH, B. D., and C. V. RILEY.] Transformations of insects. <Amer. Ent., February, 1869, v. 1, p. 118.  
Brief statement of the stages of growth of insects.
529. [WALSH, B. D., and C. V. RILEY.] Do bees injure raspberries? <Amer. Ent., February, 1869, v. 1, p. 118.  
Comments on discussion before New York Fruit Growers' Club as to the effects of bees on flowers and fruits.
530. [WALSH, B. D., and C. V. RILEY.] Best's fruit-tree invigorator again. <Amer. Ent., February, 1869, v. 1, p. 119.  
Notice of invention of a new "invigorator" by B. Best.
531. [WALSH, B. D., and C. V. RILEY.] The insect extinguisher, by Joseph Treat, N. J. <Amer. Ent., February, 1869, v. 1, p. 119.  
Critical review of pamphlet by J. Treat.
532. [WALSH, B. D., and C. V. RILEY.] More good words. <Amer. Ent., February, 1869, v. 1, p. 119.  
Notice of favorable notices of the American Entomologist.
533. [WALSH, B. D., and C. V. RILEY.] Lacewing fly. <Amer. Ent., February, 1869, v. 1, p. 119.  
Answer to inquiry of J. Huggins; characters of *Chrysopa* sp.; its hibernation as a pupa and imago.
534. [WALSH, B. D., and C. V. RILEY.] Gigantic water-bug. <Amer. Ent., February, 1869, v. 1, p. 119.  
Answer to inquiry of S. E. Munford; food-habits of *Belostoma grandis* [= *americanum*].
535. [WALSH, B. D., and C. V. RILEY.] The white-marked tussock moth again. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of A. S. Fuller; mention of seven parasites attacking *Orgyia leucostigma*.
536. [WALSH, B. D., and C. V. RILEY.] Grasshopper eggs—will they hatch? <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of C. J. Jones; frosts not likely to prevent the hatching of the eggs of *Caloptenus spretus*.
537. [WALSH, B. D., and C. V. RILEY.] Injured apple-trees. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of G. C. Broadhead; means against *Chrysobothris femorata*.

538. [WALSH, B. D., and C. V. RILEY.] Bag worms. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of W. W. Butterfield; means against *Thyridopteryx ephemeraformis*.
539. [WALSH, B. D., and C. V. RILEY.] Eggs of the apple-tree planthouse. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of M. W. Seaman; effect of frosts upon the eggs and larvæ of *Aphis mali*.
540. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of J. B. Merwin; identification of insects sent; characters of *Vanessa antiopa* and *Cynthia* [= *Pyrameis*] *atalanta*.
541. [WALSH, B. D., and C. V. RILEY.] White grubs. <Amer. Ent., February, 1869, v. 1, p. 120.  
Answer to inquiry of W. C. Holmes; undetermined white-grub injuring grass and osage orange.
542. [WALSH, B. D., and C. V. RILEY.] The polyphemus moth, *Attacus polyphemus*, Linn. <Amer. Ent., March, 1869, v. 1, pp. 121-122, fig. 95.  
*Attacus* [= *Telea*] *polyphemus*, *A. cynthia*, and *Bombyx* [= *Sericaria*] *mori* as silk-producers; food-plants, description of larva, habits, and seasons of *A.* [= *T.*] *polyphemus*; figure of the imago; ravages of *A. cecropia*; antennæ mistaken for wings; mention of Lepidoptera having fissured wings.
543. [WALSH, B. D., and C. V. RILEY.] Wasps and their habits. <Amer. Ent., March, 1869, v. 1, pp. 122-143, figs. 96-112.  
Structure, classification, and habits of North American predatory Hymenoptera; comparative characters of the digger and true wasps; figure to show the folding of the wing in true wasps; habits and figures of imagoes of *Chlorion œruleum*, *Bembex fasciata*, *Sphæx ichneumonea*, *Ammophila pictipennis*, *Pepes formosa*, *Stizus grandis* [= *Sphecius speciosus*], *S.* [= *S.*] *spectosus*, *Polopeus lunatus* [= *cementarius*], *Agonia bombycina*, *Trypoxylon albittarsæ*, *Ceropales rufiventris*, *Eumenes fraternus*, *Vespa maculata*, and *Polistes rubiginosus*; figure of imago of *Cryptus* [= *Linoceras*] *juncos* and of several nests of wasps. (See No. 375.)
544. [WALSH, B. D., and C. V. RILEY.] Do toads eat worker bees? <Amer. Ent., March, 1869, v. 1, p. 144.  
Reprint and review of article by C. Dadant, and of comments of editors of American Bee Journal; usefulness of toads.
545. [WALSH, B. D., and C. V. RILEY.] Best's invigorator once again. <Amer. Ent., March, 1869, v. 1, p. 145.  
Condemnation of B. Best's patent fruit tree and vine invigorator.
546. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., March, 1869, v. 1, p. 146.  
Notices of Nos. 1 and 2 of *Le Naturaliste Canadien*.
547. [WALSH, B. D., and C. V. RILEY.] Sugar-tree borer. <Amer. Ent., March, 1869, v. 1, p. 146.  
Answer to inquiry of E. Simms; characters and means against *Arkopalus* [= *Plagionotus*] *speciosus*.



548. [WALSH, B. D., and C. V. RILEY.] Swellings on apple scions.  
 <Amer. Ent., March, 1869, v. 1, p. 146.  
 Answer to inquiry of W. Colwell; dipterous galls on apple scions and base-wood twigs.
549. [WALSH, B. D., and C. V. RILEY.] Gas-waste *vs.* Cutculko.  
 <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of H.; merits of gas-waste as an insect destroyer.
550. [WALSH, B. D., and C. V. RILEY.] Eggs of the apple-tree plant-louse again. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answers to inquiries of C. Williams and W. L. French; means against *Aphis mali*.
551. [WALSH, B. D., and C. V. RILEY.] Drug-store pests. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of J. M. Good; food-habits of *Lasiodermus verricornis*. See No. 510.
552. [WALSH, B. D., and C. V. RILEY.] Small galls and minings on apple-twigs. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of O. O. A. Gardner; characters of undetermined galls and borings in twigs of apple-trees.
553. [WALSH, B. D., and C. V. RILEY.] Stinking bugs. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of C. L. Janney; habits of an undescribed *Brachyrhynchus*.
554. [WALSH, B. D., and C. V. RILEY.] Eggs in peach-twigs. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of G. Fisher; character of eggs of *Oecanthus niveus*.
555. [WALSH, B. D., and C. V. RILEY.] Flat-headed apple-tree borer. <Amer. Ent., March, 1869, v. 1, p. 147.  
 Answer to inquiry of B. F. Mudge; means against *Chrysobothris femorata*.
556. [WALSH, B. D., and C. V. RILEY.] A bundle of entomological queries. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of W. W. Butterfield; mentions several desirable entomological books.
557. [WALSH, B. D., and C. V. RILEY.] Grape-berry moth. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of M. C. Read; means against *Penthina vitivorana* [= *Eudemis botrana*].
558. [WALSH, B. D., and C. V. RILEY.] Hairy caterpillar. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of T. S. Gold; characters of the larva and imago of *Arctia* [= *Pyrrharctia*] *isabella*.
559. [WALSH, B. D., and C. V. RILEY.] Borer in plum-twigs. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of W. Caldwell; undetermined borer, allied to the oak-pruner, in plum-twigs. See No. 606.

560. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of W. W. Butterfield; identification of insects sent; comparative characters of *Arhopalus* [= *Cyllene*] *pictus* and *A.* [= *C.*] *robiniae*; variation in *Clytus* [= *Neoclytus*] *caprea*; generic characters of *Arhopalus* and *Clytus*. (See No. 582.)
561. [WALSH, B. D., and C. V. RILEY.] Pear-root borer. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of P. Earle; larva of *Prionus laticollis* injurious to the pear and grape.
562. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., March, 1869, v. 1, p. 148.  
 Answer to inquiry of M. H. Boye; *Gryllotalpa longipennis* [= *columbia*] a dimorphic form of *G. borealis*.
563. [WALSH, B. D., and C. V. RILEY.] The joint-worm (*Isosoma hordei* Harris). <Amer. Ent., April, 1869, v. 1, pp. 149-158, figs. 113-118.  
 Natural history, variation, parasites, ravages, and means against *Isosoma hordei*; unity of habits in insects; generic classification of the joint-worm fly; figures male and female imago; figures ♂ and ♀ imagos of *Semiotellus chalcidiphagus* n. sp., *Eurytoma* sp., and *Deotoma* sp., and of ♀ imago of *Antigaster* [= *Eupelmus*] *mirabilis*.
564. [WALSH, B. D., and C. V. RILEY.] The wavy-striped flea-beetle. (*Haltica* [*Phyllotreta*] *striolata* Illiger). <Amer. Ent., April, 1869, v. 1, pp. 158-159, fig. 119.  
 Description, habits, and ravages of *Phyllotreta striolata* [= *vittata*]; figures larva, pupa, and imago of the same; quotes from H. Shimer's "The wavy-striped flea-beetle" (Amer. Nat., December, 1868, v. 2, pp. 514-517).
565. [WALSH, B. D., and C. V. RILEY.] Concerning certain smart bugs. <Amer. Ent., April, 1869, v. 1, p. 160.  
 Preferences of *Phylloxera vitifoliae* [= *vastatrix*] and *Macrodactylus subspinosus* for certain varieties of grape-vines, of *Doryphora 10-lineata* and *Lema trilineata* for certain varieties of potato-vines, and of *Mytilaspis pomicorticis* [= *pomorum*] and *Carpocapsa pomonella* for certain varieties of apple.
566. [WALSH, B. D., and C. V. RILEY.] Curculio remedies. <Amer. Ent., April, 1869, v. 1, p. 161.  
 Comments on essay of L. C. Francis on the plum; coal oil not effective against *Conotrachelus nenuphar*.
567. [WALSH, B. D., and C. V. RILEY.] How great wits jump together. <Amer. Ent., April, 1869, v. 1, p. 161.  
 Stopping holes with hard soap ineffective against borers.
568. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., April, 1869, v. 1, p. 165.  
 Notices of Harris's Insects injurious to Vegetation, L'Insectologie agricole, and several other works not entomological.

569. [WALSH, B. D., and C. V. RILEY.] Eggs of the oblong-winged katydid. <Amer. Ent., April, 1869, v. 1, p. 166, fig. 120.  
Answer to inquiries of T. A. Thop, J. L. Rice, B. J. Campbell, H. Cheeney, and A. McMoore; eggs of *Phylloptera* [= *Amblycorypha*] *oblongifolia* compared with those of *Platyphyllum* [= *Cyrtophyllum*] *concavum*; figures of the eggs of *A. oblongifolia*.
570. [WALSH, B. D., and C. V. RILEY.] 'Mossy rose gall. <Amer. Ent., April, 1869, v. 1, p. 166.  
Answer to inquiry of F. W. Collins; characters of *Rhodites roseæ* and its gall.
571. [WALSH, B. D., and C. V. RILEY.] Caterpillars on lombardy poplars. <Amer. Ent., April, 1869, v. 1, p. 166.  
Answer to inquiry of J. F. Gurley; characters of larva, habits, food-plants, and parasites of *Acronycta acericola* [= *americana*].
572. [WALSH, B. D., and C. V. RILEY.] Museum pests. <Amer. Ent., April, 1869, v. 1, p. 166, fig. 121.  
Answer to inquiries of F. W. Hoit, jr., G. M. L., and J. Huggins; figures larva, pupa, and imago of *Anthrenus* sp.; *A. varius* compared with *A. muscorum*.
573. [WALSH, B. D., and C. V. RILEY.] Cockroach eggs. <Amer. Ent., April, 1869, v. 1, p. 166.  
Answer to inquiry of H. C. Freeman; character of the egg-cases and adult of *Platamodes unicolor*; occurrence of *Ectobia germanica* in Illinois; ravages of species of *Blattidæ*.
574. [WALSH, B. D., and C. V. RILEY.] Apple-tree leaf-crumplers. <Amer. Ent., April, 1869, v. 1, p. 166.  
Answer to inquiry of J. F. Jones; result of the work of the larvæ of *Phycita nebulo* [= *Acrobasis indiginella*] on the growth of apple-trees.
575. [WALSH, B. D., and C. V. RILEY.] A most precious bug. <Amer. Ent., April, 1869, v. 1, p. 167.  
Answer to inquiry of E. S. Holmes; characters and variety of *Hylecoetus lugubris*; destructiveness of *Lymexylon navale*; use of the maxillary palpi in the ♂♂ of *Lymexylidæ*.
576. [WALSH, B. D., and C. V. RILEY.] Blackberry-cane borers. <Amer. Ent., April, 1869, v. 1, p. 167.  
Answer to inquiry of C. Parry; characters and habits of larva of unnamed borer [= *Bembëcia marginata*]; plants affected by species of *Ægeriadæ*.
577. [WALSH, B. D., and C. V. RILEY.] Rows of eggs in pear-twigs. <Amer. Ent., April, 1869, v. 1, p. 167.  
Answer to inquiry of H. C. Freeman; characters of unknown eggs found in pear-twigs.
578. [WALSH, B. D., and C. V. RILEY.] An orchard giving out. <Amer. Ent., April, 1869, v. 1, p. 168.  
Answer to inquiry of W. M. Clemens; habits and means against *Saperda bivittata* [= *candida*] and *Chrysobothris femorata*.
579. [WALSH, B. D., and C. V. RILEY.] Plant-louse eggs on apple and mountain ash. <Amer. Ent., April, 1869, v. 1, p. 168.  
Answer to inquiry of W. Stewart; eggs of *Aphis mali* on apple-twigs and probably on those of mountain ash; *Aspidiotus harrisii* [= *Chionaspis furfurus*] infests both trees.

580. [WALSH, B. D., and C. V. RILEY.] Gigantic rhinoceros beetle. <Amer. Ent., April, 1869, v. 1, p. 168.  
Answer to inquiry of F. G. Smith; characters of *Dynastes tityrus*.
581. [WALSH, B. D., and C. V. RILEY.] Bee queries. <Amer. Ent., April, 1869, v. 1, p. 168.  
Answer to inquiry of W. R. Howard; *Galleria cereana* always injurious; a new swarm composed of both old and new bees.
582. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., April, 1869, v. 1, p. 168.  
Answer to inquiry of W. W. Butterfield; characters of *Clytus* [= *Neoclytus*] *caprea*. (See No. 560.)
583. [WALSH, B. D., and C. V. RILEY.] Elm-tree borer. <Amer. Ent., April, 1869, v. 1, p. 168.  
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584. [WALSH, B. D., and C. V. RILEY.] The chinch-bug (*Micropus leucopterus* Say). <Amer. Ent., 1869, v. 1, May, pp. 169-177, fig. 122; June, pp. 194-199, figs. 135-139. Reprint: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 15-37, figs. 1-10.  
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598. [WALSH, B. D., and C. V. RILEY.] Insects to be named. <Amer. Ent., May, 1869, v. 1, p. 186.  
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664. [WALSH, B. D., and C. V. RILEY.] Hairy grape-leaf folders. <Amer. Ent., July, 1869, v. 1, p. 224.  
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669. [WALSH, B. D., and C. V. RILEY.] New insect-foe of the blackberry. <Amer. Ent., July, 1869, v. 1, p. 225.  
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670. [WALSH, B. D., and C. V. RILEY.] Army-worm. <Amer. Ent., July, 1869, v. 1, p. 225.  
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673. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., July, 1869, v. 1, p. 225.  
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674. [WALSH, B. D., and C. V. RILEY.] Chrysalis of the virgin tiger moth. <Amer. Ent., July, 1869, v. 1, p. 225.  
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676. [WALSH, B. D., and C. V. RILEY.] Raspberry brand. <Amer. Ent., July, 1869, v. 1, p. 226.  
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677. [WALSH, B. D., and C. V. RILEY.] Rose-worms. <Amer. Ent., July, 1869, v. 1, p. 226.  
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678. [WALSH, B. D., and C. V. RILEY.] Plum-tree plant-lice. <Amer. Ent., July, 1869, v. 1, p. 226, figs. 165-167.  
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679. [WALSH, B. D., and C. V. RILEY.] Ichneumon-flies. <Amer. Ent., July, 1869, v. 1, p. 226.  
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681. [WALSH, B. D., and C. V. RILEY.] Sweet-potato beetles. <Amer. Ent., July, 1869, v. 1, p. 227.  
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683. [WALSH, B. D., and C. V. RILEY.] Plum-tree insects. <Amer. Ent., July, 1869, v. 1, p. 227.  
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684. [WALSH, B. D., and C. V. RILEY.] Apple-tree bugs. <Amer. Ent., July, 1869, v. 1, p. 227.  
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685. [WALSH, B. D., and C. V. RILEY.] Hickory-stem gall-louse. <Amer. Ent., July, 1869, v. 1, p. 227.  
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686. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-hopper. <Amer. Ent., July, 1869, v. 1, p. 227.  
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687. [WALSH, B. D., and C. V. RILEY.] Twelve-spotted Diabrotica. <Amer. Ent., July, 1869, v. 1, p. 227, fig. 168.  
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688. [WALSH, B. D., and C. V. RILEY.] The caterpillar of the forest. <Amer. Ent., July, 1869, v. 1, p. 227.  
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689. [WALSH, B. D., and C. V. RILEY.] Strawberry destroyer. <Amer. Ent., July, 1869, v. 1, p. 227.  
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690. [WALSH, B. D., and C. V. RILEY.] Eggs of bugs on strawberry. <Amer. Ent., July, 1869, v. 1, p. 227.  
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691. [WALSH, B. D., and C. V. RILEY.] Frog-spittle insects. <Amer. Ent., July, 1869, v. 1, p. 228. Reprint: <Cultivator and Country Gentleman, 29 July, 1869, v. 34, p. 82.  
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692. [WALSH, B. D., and C. V. RILEY.] Eggs of ground-beetle. <Amer. Ent., July, 1869, v. 1, p. 228.  
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694. [WALSH, B. D., and C. V. RILEY.] Tomato-stalk borer. <Amer. Ent., July, 1869, v. 1, p. 228.  
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695. [WALSH, B. D., and C. V. RILEY.] Breeding cages. <Amer. Ent., July, 1869, v. 1, p. 228.  
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696. [WALSH, B. D., and C. V. RILEY.] Elm-tree borer. <Amer. Ent., July, 1869, v. 1, p. 228.  
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697. [WALSH, B. D., and C. V. RILEY.] Peach-twigg borer. <Amer. Ent., July, 1869, v. 1, p. 228.  
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699. [WALSH, B. D., and C. V. RILEY.] Elm-tree saw-fly. <Amer. Ent., July, 1869, v. 1, p. 228.  
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701. [WALSH, B. D., and C. V. RILEY.] The close of the first volume. <Amer. Ent., August, 1869, v. 1, p. 229.  
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702. [WALSH, B. D., and C. V. RILEY.] The Royal horned caterpillar. (*Ceratocampa (Citheronia) regalis*, Fabr.). <Amer. Ent., August, 1869, v. 1, pp. 230-231, pl. 1.  
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703. [WALSH, B. D., and C. V. RILEY.] Comparative scarcity of the Curculio again. <Amer. Ent., August, 1869, v. 1, p. 241.  
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704. [WALSH, B. D., and C. V. RILEY.] A possible cause of the bee disease. <Amer. Ent., August, 1869, v. 1, pp. 241-242.  
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705. [WALSH, B. D., and C. V. RILEY.] Ash and mountain ash. <Amer. Ent., August, 1869, v. 1, pp. 243-244.  
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706. [WALSH, B. D., and C. V. RILEY.] How the Curculio flies by night. <Amer. Ent., August, 1869, v. 1, p. 244.  
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707. [WALSH, B. D., and C. V. RILEY.] The periodical Cicada; our first brood established. <Amer. Ent., August, 1869, v. 1, p. 244.  
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708. [WALSH, B. D., and C. V. RILEY.] Be on the guard. <Amer. Ent., August, 1869, v. 1, p. 244.  
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709. [WALSH, B. D., and C. V. RILEY.] Prophecy fulfilled. <Amer. Ent., August, 1869, v. 1, p. 244.  
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710. [WALSH, B. D., and C. V. RILEY.] A poisonous worm. <Amer. Ent., August, 1869, v. 1, p. 245.  
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711. [WALSH, B. D., and C. V. RILEY.] Wheat midge, alias milk weevil, alias red weevil. <Amer. Ent., August, 1869, v. 1, p. 245.  
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712. [WALSH, B. D., and C. V. RILEY.] Large fish-fly. <Amer. Ent., August, 1869, v. 1, p. 245.  
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714. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 245.  
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716. [WALSH, B. D., and C. V. RILEY.] Bee moth. <Amer. Ent., August, 1869, v. 1, p. 246, fig. 182.  
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717. [WALSH, B. D., and C. V. RILEY.] Canker-worm parasites. <Amer. Ent., August, 1869, v. 1, p. 246.  
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718. [WALSH, B. D., and C. V. RILEY.] Beetles swarming about the lawn. <Amer. Ent., August, 1869, v. 1, p. 246.  
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719. [WALSH, B. D., and C. V. RILEY.] Tiger-beetle larva. <Amer. Ent., August, 1869, v. 1, p. 246.  
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720. [WALSH, B. D., and C. V. RILEY.] Large compound gall on grape-vine. <Amer. Ent., August, 1869, v. 1, p. 247, fig. 183.  
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721. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 247.  
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722. [WALSH, B. D., and C. V. RILEY.] Destructive larvæ. <Amer. Ent., August, 1869, v. 1, p. 247.  
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723. [WALSH, B. D., and C. V. RILEY.] Eggs of tree-cricket on grape-vine. <Amer. Ent., August, 1869, v. 1, p. 247.  
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724. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-gall. <Amer. Ent., August, 1869, v. 1, p. 248, fig. 184.  
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725. [WALSH, B. D., and C. V. RILEY.] Grape-vine insects. <Amer. Ent., August, 1869, v. 1, p. 248.  
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726. [WALSH, B. D., and C. V. RILEY.] Museum pests. <Amer. Ent., August, 1869, v. 1, p. 248.  
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727. [WALSH, B. D., and C. V. RILEY.] Wheat maggots. <Amer. Ent., August, 1869, v. 1, p. 248.  
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728. [WALSH, B. D., and C. V. RILEY.] Parasites on "hateful grasshopper." <Amer. Ent., August, 1869, v. 1, p. 249.  
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729. [WALSH, B. D., and C. V. RILEY.] Crippled moths. <Amer. Ent., August, 1869, v. 1, p. 248.  
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730. [WALSH, B. D., and C. V. RILEY.] Insects on the oleander. <Amer. Ent., August, 1869, v. 1, p. 249, fig. 185.  
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731. [WALSH, B. D., and C. V. RILEY.] Insects found on apple-trees. <Amer. Ent., August, 1869, v. 1, p. 249.  
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732. [WALSH, B. D., and C. V. RILEY.] Beetles named. <Amer. Ent., August, 1869, v. 1, p. 249.  
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733. [WALSH, B. D., and C. V. RILEY.] Gigantic water-bug. <Amer. Ent., August, 1869, v. 1, p. 249, fig. 186.  
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734. [WALSH, B. D., and C. V. RILEY.] Worm eating into green tomatoes. <Amer. Ent., August, 1869, v. 1, p. 249.  
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735. [WALSH, B. D., and C. V. RILEY.] Miscellaneous. <Amer. Ent., August, 1869, v. 1, p. 249.  
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736. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 250.  
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737. [WALSH, B. D., and C. V. RILEY.] Lightning-hoppers. <Amer. Ent., August, 1869, v. 1, p. 250.  
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738. [WALSH, B. D., and C. V. RILEY.] Bag-worms. <Amer. Ent., August, 1869, v. 1, p. 250.  
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739. [WALSH, B. D., and C. V. RILEY.] Woolly gall on white oak. <Amer. Ent., August, 1869, v. 1, p. 250, fig. 187.  
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740. [WALSH, B. D., and C. V. RILEY.] Cabbage pests. <Amer. Ent., August, 1869, v. 1, p. 250.  
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741. [WALSH, B. D., and C. V. RILEY.] Bugs gathering on pear shoots. <Amer. Ent., August, 1869, v. 1, p. 250.  
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742. [WALSH, B. D., and C. V. RILEY.] Potato-bug. <Amer. Ent., August, 1869, v. 1, p. 250.  
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743. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 251.  
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744. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., August, 1869, v. 1, p. 251.  
Answer to inquiry of C. Waters; abundance of undetermined moth (*Corycia vestaliata*?); larva of the same on apple-trees.
745. [WALSH, B. D., and C. V. RILEY.] Oak-fig gall. <Amer. Ent., August, 1869, v. 1, p. 251.  
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746. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., August, 1869, v. 1, p. 251.  
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747. [WALSH, B. D., and C. V. RILEY.] Small apple-leaf worms. <Amer. Ent., August, 1869, v. 1, p. 251.  
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748. [WALSH, B. D., and C. V. RILEY.] Rose-bug on apples. <Amer. Ent., August, 1869, v. 1, p. 251.  
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749. [WALSH, B. D., and C. V. RILEY.] Unicorn apple-tree caterpillar. <Amer. Ent., August, 1869, v. 1, p. 251.  
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750. [WALSH, B. D., and C. V. RILEY.] Large water beetle. <Amer. Ent., August, 1869, v. 1, p. 251.  
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751. [WALSH, B. D., and C. V. RILEY.] Beetles around peach-trees. <Amer. Ent., August, 1869, v. 1, p. 252.  
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752. [WALSH, B. D., and C. V. RILEY.] A quick traveler. <Amer. Ent., August, 1869, v. 1, p. 252.  
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753. [WALSH, B. D., and C. V. RILEY.] Unknown moth. <Amer. Ent., August, 1869, v. 1, p. 252.  
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754. [WALSH, B. D., and C. V. RILEY.] Corn-borer. <Amer. Ent., August, 1869, v. 1, p. 252.  
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755. [WALSH, B. D., and C. V. RILEY.] Horns of stag-beetle. <Amer. Ent., August, 1869, v. 1, p. 252.  
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756. [WALSH, B. D., and C. V. RILEY.] Imported gooseberry worms. <Amer. Ent., August, 1869, v. 1, p. 252.  
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757. [WALSH, B. D., and C. V. RILEY.] Worm on bark of walnut-tree. <Amer. Ent., August, 1869, v. 1, p. 252.  
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758. [WALSH, B. D., and C. V. RILEY.] Rotten root. <Amer. Ent., August, 1869, v. 1, p. 252.  
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759. [WALSH, B. D., and C. V. RILEY.] Large dragon-fly. <Amer. Ent., August, 1869, v. 1, p. 252.  
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760. [WALSH, B. D., and C. V. RILEY.] Stinging larvæ. <Amer. Ent., August, 1869, v. 1, p. 252.  
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761. [WALSH, B. D., and C. V. RILEY.] Raspberry worms. <Amer. Ent., August, 1869, v. 1, p. 252.  
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762. [WALSH, B. D., and C. V. RILEY.] Leaf-galls and caterpillars on the sugarberry. <Amer. Ent., August, 1869, v. 1, p. 252.  
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763. [WALSH, B. D., and C. V. RILEY.] Dark grape-worm. <Amer. Ent., August, 1869, v. 1, p. 252.  
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764. [WALSH, B. D., and C. V. RILEY.] Too fond of honey. <Amer. Ent., August, 1869, v. 1, p. 252.  
Answer to inquiry of T. W. Gordon; *Cermatia forceps* found in a jar of honey.
765. [WALSH, B. D., and C. V. RILEY.] Caterpillar of polyphemus moth. <Amer. Ent., August, 1869, v. 1, p. 252.  
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766. [WALSH, B. D., and C. V. RILEY.] Why noxious insects increase upon us. <Amer. Ent., September-October, 1869, v. 2, pp. 1-2.  
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767. [WALSH, B. D., and C. V. RILEY.] Tortoise-beetles. <Amer. Ent., September-October, 1869, v. 2, pp. 2-5, figs. 1-3.  
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768. [WALSH, B. D., and C. V. RILEY.] Scientific nomenclature. <Amer. Ent., September-October, 1869, v. 2, pp. 5-8.  
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769. [WALSH, B. D., and C. V. RILEY.] Killing apple-worms by machinery. <Amer. Ent., September-October, 1869, v. 2, p. 9.  
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770. [WALSH, B. D., and C. V. RILEY.] A potter wasp (*Odynerus flavipes*? Fabr.). <Amer. Ent., September-October, 1869, v. 2, p. 10, fig. 4.  
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771. [WALSH, B. D., and C. V. RILEY.] Tomato-worms not poisonous. <Amer. Ent., September-October, 1869, v. 2, p. 11.  
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772. [WALSH, B. D., and C. V. RILEY.] Gooseberry and currant worms. <Amer. Ent., September-October, 1869, v. 2, pp. 12-22, figs. 5-11.  
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773. [WALSH, B. D., and C. V. RILEY.] Striped cucumber beetle. <Amer. Ent., September-October, 1869, v. 2, p. 24, figs. 17-19.  
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774. [WALSH, B. D., and C. V. RILEY.] Leafy oak gall. <Amer. Ent., September-October, 1869, v. 2, p. 25, fig. 20.  
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775. [WALSH, B. D., and C. V. RILEY.] Drop of gold. <Amer. Ent., September-October, 1869, v. 2, p. 25.  
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776. [WALSH, B. D., and C. V. RILEY.] The luna moth. <Amer. Ent., September-October, 1869, v. 2, p. 25.  
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777. [WALSH, B. D., and C. V. RILEY.] Hag-moth larva. <Amer. Ent., September-October, 1869, v. 2, p. 25, fig. 21.  
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778. [WALSH, B. D., and C. V. RILEY.] Stinging bug. <Amer. Ent., September–October, 1869, v. 2, p. 25.  
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779. [WALSH, B. D., and C. V. RILEY.] Pear-tree worms. <Amer. Ent., September–October, 1869, v. 2, p. 25.  
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780. [WALSH, B. D., and C. V. RILEY.] "Dobson." <Amer. Ent., September–October, 1869, v. 2, p. 25.  
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781. [WALSH, B. D., and C. V. RILEY.] White-pine weevil. <Amer. Ent., September–October, 1869, v. 2, p. 26, fig. 22.  
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782. [WALSH, B. D., and C. V. RILEY.] Unnatural secretion of wax. <Amer. Ent., September–October, 1869, v. 2, p. 26.  
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783. [WALSH, B. D., and C. V. RILEY.] Raspberry borer. <Amer. Ent., September–October, 1869, v. 2, p. 26.  
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784. [WALSH, B. D., and C. V. RILEY.] Cocoon of horn-bug. <Amer. Ent., September–October, 1869, v. 2, p. 26.  
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785. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September–October, 1869, v. 2, p. 26, fig. 23.  
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786. [WALSH, B. D., and C. V. RILEY.] Cecropia moth caterpillar. <Amer. Ent., September–October, 1869, v. 2, p. 26.  
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787. [WALSH, B. D., and C. V. RILEY.] How cut-worms originate. <Amer. Ent., September–October, 1869, v. 2, p. 26.  
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788. [WALSH, B. D., and C. V. RILEY.] Red-humped caterpillar. <Amer. Ent., September–October, 1869, v. 2, p. 27, figs. 24–26.  
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789. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September–October, 1869, v. 2, p. 27.  
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790. [WALSH, B. D., and C. V. RILEY.] Gilt gold-beetle. <Amer. Ent.; September–October, 1869, v. 2, p. 27.  
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791. [WALSH, B. D., and C. V. RILEY.] The trumpet grape-gall. <Amer. Ent., September–October, 1869, v. 2, p. 28, fig. 27.  
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792. [WALSH, B. D., and C. V. RILEY.] Grape-berry moth. <Amer. Ent., September–October, 1869, v. 2, p. 28.  
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793. [WALSH, B. D., and C. V. RILEY.] Oak pruner. <Amer. Ent., September–October, 1869, v. 2, p. 28.  
 Answer to inquiry of T. J. Plumb; occurrence of *Elaphidion putator* [= *villosum*] at Madison, Wis.
794. [WALSH, B. D., and C. V. RILEY.] Potato-bugs. <Amer. Ent., September–October, 1869, v. 2, p. 28.  
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795. [WALSH, B. D., and C. V. RILEY.] Blood-sucking cone-nose. <Amer. Ent., September–October, 1869, v. 2, p. 28.  
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796. [WALSH, B. D., and C. V. RILEY.] Woolly slug-like worm on apple. <Amer. Ent., September–October, 1869, v. 2, p. 29.  
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797. [WALSH, B. D., and C. V. RILEY.] A water-bug. <Amer. Ent., September–October, 1869, v. 2, p. 29.  
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798. [WALSH, B. D., and C. V. RILEY.] Goldenrod galls. <Amer. Ent., September–October, 1869, v. 2, p. 29.  
 Answer to inquiry of G. W. C.; characters of galls of *Trypeta solidaginis* and *Cecidomyia solidaginis*.

799. [WALSH, B. D., and C. V. RILEY.] Oak-leaf gall. <Amer. Ent., September–October, 1869, v. 2, p. 29.  
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800. [WALSH, B. D., and C. V. RILEY.] Humble bees. <Amer. Ent., September–October, 1869, v. 2, p. 30.  
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801. [WALSH, B. D., and C. V. RILEY.] Can land be insured against cut-worms and other insects? <Amer. Ent., September–October, 1869, v. 2, p. 30.  
Answer to inquiry of A. Willis; means against larvæ of cut-worms.
802. [WALSH, B. D., and C. V. RILEY.] Beetles named. <Amer. Ent., September–October, 1869, v. 2, p. 30.  
Answer to inquiry of T. W. Hoyt, jr.; characters of *Cassida* [= *Coptocycla*] *aurichalcea* and *Brachinus americanus*; effect of the discharge made by *Brachinus* sp. upon the inside of the human mouth.
803. [WALSH, B. D., and C. V. RILEY.] Royal horned-caterpillar. <Amer. Ent., September–October, 1869, v. 2, p. 30.  
Answer to inquiries of W. C. Holmes and M. G. Kern; larva of *Citheronia regalis* found feeding on *Syringa*.
804. [WALSH, B. D., and C. V. RILEY.] Parsnip caterpillar. <Amer. Ent., September–October, 1869, v. 2, p. 30.  
Answer to inquiry of T. W. Hoyt, jr.; characters of larva of *Papilio asterias*.
805. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., September–October, 1869, v. 2, p. 31.  
Answer to inquiry of C. P. Faulkner; identification of several beetles; habits of *Creophilus villosus*, *Listotrophus cingulatus*, *Scarites subterraneus*, and *Ulonia impressa*.
806. [WALSH, B. D., and C. V. RILEY.] Beetle named. <Amer. Ent., September–October, 1869, v. 2, p. 31.  
Answer to inquiry of W. Keyes; habits and characters of larva of *Calopteron terminale*; distinctness of *C. reticulatum* from *C. terminale*.
807. [WALSH, B. D., and C. V. RILEY.] Moth named. <Amer. Ent., September–October, 1869, v. 2, p. 31.  
Answer to inquiry of W. G. Barton; food-plant of larva and characters of imago of *Alaria* [= *Rhodophora*] *florida*.
808. [WALSH, B. D., and C. V. RILEY.] Worm boring into cucumber. <Amer. Ent., September–October, 1869, v. 2, p. 31.  
Answer to inquiries of G. W. C., O. L. Barler, and E. S. Smith; characters of larva and imago of *Phakellura* [= *Eudiophtis*] *nitidalis*; food-plants of larva; characters of undetermined larva found boring in cucumbers.

809. [WALSH, B. D., and C. V. RILEY.] Caterpillar of the io moth. <Amer. Ent., September-October, 1869, v. 2, p. 31.  
Answer to inquiry of Mrs. Tildesley; characters of larva and imago of *Saturnia* [= *Hyperchiria*] io; food-plant and urticating properties of the larva.
810. [WALSH, B. D., and C. V. RILEY.] Apple-tree worms. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of H. K. Vickroy; habits and characters of larva of *Acrobasis* [= *Pempelia*] *hammondi*; habits of larva of *Phycita nebulo* [= *Acrobasis indiginella*].
811. [WALSH, B. D., and C. V. RILEY.] Stinging larvæ. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of J. C. Falls; meaning of the vernacular and technical names of *Empretia stimulea*; urticating properties of lepidopterous larvæ.
812. [WALSH, B. D., and C. V. RILEY.] Lappet caterpillar on apple-tree. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of W. Stark; characters of larva of *Gastropacha americana*.
813. [WALSH, B. D., and C. V. RILEY.] Spined spider. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiries of G. W. Kinney and T. W. Gordon; characters and synonymy of *Epeira* [= *Acrosoma*] *spinea*.
814. [WALSH, B. D., and C. V. RILEY.] Dangerous looking. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of M. M. Kenzie; characters and sting of *Mutilla coccinea* [= *Sphærophthalma occidentalis*].
815. [WALSH, B. D., and C. V. RILEY.] Bag-worms again. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
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816. [WALSH, B. D., and C. V. RILEY.] Large water-beetle. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of S. E. Munford; secondary sexual characters in elytra of *Cybister fimbriolatus*. See No. 750.
817. [WALSH, B. D., and C. V. RILEY.] Beetles under dead fish. <Amer. Ent., September-October, 1869, v. 2, p. 32.  
Answer to inquiry of T. Ferrell; food-habits and characters of *Silpha peltata* [= *americana*].
818. [WALSH, B. D., and C. V. RILEY.] Universal remedies. <Amer. Ent., November, 1869, v. 2, pp. 33-35.  
Worthlessness of any one substance as a means against insects.
819. [WALSH, B. D., and C. V. RILEY.] Tent-caterpillars and fall-web-worms. <Amer. Ent., November, 1869, v. 2, p. 39.  
Critical review of article in Western Rural, August 26, 1869; seasons, habits, food-plants, and characters of *Clisiocampa americana* and *Hyphantria textor* [= *cunea*].



820. [WALSH, B. D., and C. V. RILEY.] The boll-worm or corn-worm. 2d article. (*Heliothis armigera*, Hübner.) <Amer. Ent., November, 1869, v. 2, pp. 42-44, fig. 29.

Seasons, food-plants, ravages of, and means against *Heliothis armigera*; figures of larvæ, pupa, cocoon, and imago of the same; food-plants of *Gortyna nitela*.

821. [WALSH, B. D., and C. V. RILEY.] Galls and their architects. 2d article. <Amer. Ent., 1869-1870, v. 2: November, pp. 45-50, figs. 30-32; December-January, pp. 70-74, figs. 45-47; February, pp. 103-106, figs. 68-71.

See No. 518; definition and classification of galls; descriptions and figures of galls and larvæ of *Nematus salicis-pomum*, *Euura s.-ovum*, and *E. s.-gemma* [= *orbitalis*]; habits, seasons, and descriptions of the same; habits and seasons of *Anthonomus sycophanta*, *Batrachedra salicis-pomonella*, and *Nematus mendicus*; differences between gall-makers and guest-flies; occurrence of distinct genera of gall-insects on plants of distinct genera; descriptions and figures of galls of *Cynips* [= *Andricus*] *quercus-seminator* and *C. q.-frondosa*; synoptic table of North American genera of *Cynipidæ* *Pes-nides*; description of *Antistrophus* n. g. and of *A. lygodesmiae-pisum* n. sp. and its gall; description and figure of the larva and imago of *Agilus ruficollis* and its gall; habits, food-plants of, and means against, the same; figure and description of *Baridius* [= *Ampelogypter*] *sesostris* and its gall; habits, food-plants of, and means against, the same; characters of *Madarus ampelopsidos* [= *Ampelogypter ater*] and its gall; habits of *Buprestidæ*.

822. [WALSH, B. D., and C. V. RILEY.] Toads in gardens. <Amer. Ent., November, 1869, v. 2, p. 50.

Value of toads as a means against noxious insects, etc., in gardens.

823. [WALSH, B. D., and C. V. RILEY.] Notes on the Tarantula-killer. <Amer. Ent., November, 1869, v. 2, p. 52.

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824. [WALSH, B. D., and C. V. RILEY.] Swarms of lady-birds. <Amer. Ent., November, 1869, v. 2, p. 55.

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825. [WALSH, B. D., and C. V. RILEY.] The squash-bug does not touch the white bush scollop. <Amer. Ent., November, 1869, v. 2, p. 55.

*Coreus* [= *Anasa*] *tristis* does not attack the white bush scollop variety of the squash-vine; means against the same.

826. [WALSH, B. D., and C. V. RILEY.] [Scientific names.] <Amer. Ent., November, 1869, v. 2, p. 57.

Use of English and scientific names of insects.

827. [WALSH, B. D., and C. V. RILEY.] On our table. <Amer. Ent., November, 1869, v. 2, pp. 57-58.

Notices of: Record of American entomology for the year 1868.—The Canadian entomologist.—The butterflies of North America, by W. H. Edwards.—Guide to the study of insects, by A. S. Packard, jr., etc.

828. [WALSH, B. D., and C. V. RILEY.] Locust borer. <Amer. Ent., November, 1869, v. 2, p. 58.  
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829. [WALSH, B. D., and C. V. RILEY.] Saddle-back larva. <Amer. Ent., November, 1869, v. 2, p. 59, fig. 36.  
Answer to inquiry of G. T. Cost; figure of the larva of *Empretia stimulea* found on Indian corn.
830. [WALSH, B. D., and C. V. RILEY.] Silk spiders. <Amer. Ent., November, 1869, v. 2, p. 59.  
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831. [WALSH, B. D., and C. V. RILEY.] Entomological works. <Amer. Ent., November, 1869, v. 2, p. 59.  
Answer to inquiry of S. W. Cowles; mention of works containing descriptions of North American Coleoptera and Lepidoptera; food-plants of the larva of *Eudryas unio*.
832. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 59.  
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833. [WALSH, B. D., and C. V. RILEY.] A new bee enemy. <Amer. Ent., November, 1869, v. 2, p. 59.  
Answer to inquiry of F. Brewer; characters of an undetermined carabid larva found eating *Apis mellifica*.
834. [WALSH, B. D., and C. V. RILEY.] Thousand-legged worms. <Amer. Ent., November, 1869, v. 2, p. 59.  
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835. [WALSH, B. D., and C. V. RILEY.] Cabbage-worms. <Amer. Ent., November, 1869, v. 2, p. 60, figs. 37-38.  
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836. [WALSH, B. D., and C. V. RILEY.] The rape butterfly. Amer. Ent., November, 1869, v. 2, p. 60.  
Answer to inquiry of J. E. Chase; occurrence of *Pieris rapæ* in Bangor, Me.
837. [WALSH, B. D., and C. V. RILEY.] Bad packing. <Amer. Ent., November, 1869, v. 2, p. 60.  
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838. [WALSH, B. D., and C. V. RILEY.] Granddaddy long-legs. <Amer. Ent., November, 1869, v. 2, p. 60.  
Answer to inquiry of W. R. Howard; vernacular names and habits of *Phalangida*.
839. [WALSH, B. D., and C. V. RILEY.] Borer in apple-twigg. <Amer. Ent., November, 1869, v. 2, p. 60.  
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840. [WALSH, B. D., and C. V. RILEY.] Grape-vine leaf-galls. <Amer. Ent., November, 1869, v. 2, p. 61.  
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841. [WALSH, B. D., and C. V. RILEY.] Maple-worms. <Amer. Ent., November, 1869, v. 2, p. 61.  
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842. [WALSH, B. D., and C. V. RILEY.] Melancholy chafer in apples. <Amer. Ent., November, 1869, v. 2, p. 61, fig. 39.  
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843. [WALSH, B. D., and C. V. RILEY.] Worms boring in cucumbers. <Amer. Ent., November, 1869, v. 2, p. 61.  
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844. [WALSH, B. D., and C. V. RILEY.] Lilac-borer. <Amer. Ent., November, 1869, v. 2, p. 61.  
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845. [WALSH, B. D., and C. V. RILEY.] Burying beetles. <Amer. Ent., November, 1869, v. 2, p. 61.  
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846. [WALSH, B. D., and C. V. RILEY.] Wire-worms in potatoes. <Amer. Ent., November, 1869, v. 2, p. 62.  
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847. [WALSH, B. D., and C. V. RILEY.] Insects named. <Amer. Ent., November, 1869, v. 2, p. 62.  
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848. [WALSH, B. D., and C. V. RILEY.] Girdled pear twigs. <Amer. Ent., November, 1869, v. 2, p. 62.  
Answer to inquiry of T. A. Thorp; pear twigs girdled by *Oncideres cingulata*.
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U.S. DEPARTMENT OF AGRICULTURE.  
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PREPARED, BY AUTHORITY OF THE SECRETARY OF AGRICULTURE,

BY

SAMUEL HENSHAW.

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PART III.

THE MORE IMPORTANT WRITINGS

OF

CHARLES VALENTINE RILEY.

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SAMUEL HENSHAW.

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PART III.

THE MORE IMPORTANT WRITINGS

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## 1061. RILEY, C. V. Native bark-lice on apple-trees. &lt;Prairie Farmer, 17 April, 1869, [v. 39], n. s., v. 23, p. 122, 1 fig. S.-b. No. 3, p. 57.

Answer to inquiry of T. B. Gardner; life history of and means against *Diaspis harrii* [= *Chionaspis furfurus*]; figure of the same.

## 1062. RILEY, C. V. Curculio. &lt;Prairie Farmer, 17 April, 1867, [v. 39], n. s., v. 23, p. 122. S.-b. No. 3, p. 57.

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## 1063. RILEY, C. V. Cherry-tree borers. &lt;Prairie Farmer, 17 April, 1869, [v. 39], n. s., v. 23, p. 122. S.-b. No. 3, p. 57.

Answer to inquiry of Onargo Horticultural Society; larvæ of *Buprestis* [= *Diroera*] *divaricata* and of *Trochilium* sp., injurious to cherry-trees; soft-maple attacked by *T.* [= *Egeria*] *acerni*; means against these insects.



1064. RILEY, C. V. White-grub fungus. <Prairie Farmer, 15 May, 1869, [v. 39], n. s., v. 23, p. 154. S.-b. No. 3, p. 76.  
Letter from D. W. Tindall, with answer; ravages of *Lachnosterna quercina* [= *fusca*] in Clinton County, Mo., in 1868; *Torrubia* growing on the larvæ in 1869.
1065. RILEY, C. V. The canker-worm, *Anisopteryx vernata* Peck. <Moore's Rural New Yorker, 29 May, 1869, v. 20, p. 345, figs. S.-b. No. 3, p. 73.  
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1066. RILEY, C. V. The seed-corn maggot, *Anthomyia zeas*, Riley. Destroying the seed after it is planted. <Moore's Rural New Yorker, June, 1869, fig. S.-b. No. 3, p. 81. Advance print, with changes: <1st Ann. Rept. State Ent. Mo., March, 1869, pp. 154-156, figs. 86-87.  
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1067. RILEY, C. V. Cherry-tree plant-lice. <Moore's Rural New Yorker, 10 July, 1869, v. 20, p. 443. S.-b. No. 3, p. 83.  
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1068. RILEY, C. V. Gooseberry span-worms. <Moore's Rural New Yorker, 10 July, 1869, v. 20, p. 443. S.-b. No. 3, p. 83.  
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1069. RILEY, C. V. Apple-leaf crumpler mistaken for Curculio. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218, fig. S.-b. No. 3, p. 80.  
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1070. RILEY, C. V. Peach-tree borer. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218. S.-b. No. 3, p. 80.  
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1071. RILEY, C. V. To protect plums from Curculio. <Prairie Farmer, 10 July, 1869, [v. 40], n. s., v. 24, p. 218. S.-b. No. 3, p. 80.  
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1072. RILEY, C. V. White-grub; information wanted. <Prairie Farmer, 28 August, 1869, [v. 40], n. s., v. 24, p. 274, 4 figs. S.-b. No. 3, p. 95.  
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1073. RILEY, C. V. Unknown corn pest. <Prairie Farmer, 28 August, 1869, [v. 40], n. s., v. 24, p. 274. S.-b. No. 3, p. 95.  
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1074. RILEY, C. V. Larva of the grape-vine flea-beetle. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, pp. 100, 103.  
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1075. RILEY, C. V. Rose bug. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, pp. 100, 103.  
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1076. RILEY, C. V. Large green caterpillar on the apple. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100.  
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1077. RILEY, C. V. Conical galls on leaves of wild grape-vine. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100.  
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1078. RILEY, C. V. A strange bug. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100; No. 4, p. 3.  
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1079. RILEY, C. V. Currant-worms and black-currants. <Moore's Rural New Yorker, 28 August, 1869, v. 20, p. 555. S.-b. No. 3, p. 100; No. 4, p. 3.  
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1081. [RILEY, C. V.] Insects injurious to the grape-vine. [No. 1.] <Amer. Ent., August, 1869, v. 1, pp. 231-234, figs. 169-173. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 87-91, figs. 60-63.  
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1083. RILEY, C. V. The borers. <Western Rural, September, 1869. S.-b. No. 4, p. 2.  
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1084. RILEY, C. V. Supposed bark-lice eggs in Missouri. <Prairie Farmer, 4 September, 1869, [v. 40], n. s., v. 24, p. 282. S.-b. No. 3, p. 95.  
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1087. RILEY, C. V. Larva of the imperial moth. <Prairie Farmer, 9 October, 1869, [v. 40], n. s., v. 24, p. 322. S.-b. No. 3, p. 92.  
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1088. RILEY, C. V. Apple snout-beetle or four-humped Curculio. <Prairie Farmer, 9 October, 1869, [v. 40], n. s., v. 24, p. 322. S.-b. No. 3, p. 92.  
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1091. [RILEY, C. V.] Insects injurious to the grape-vine. No. 3. <Amer. Ent., November, 1869, v. 2, pp. 54-55, figs. 33-35. Reprint, with slight changes. <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 74-76, figs. 49-51.  
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1092. RILEY, C. V. The saddle-back caterpillar. <Moore's Rural New Yorker, 4 December, 1869, v. 20, p. —, fig. S.-b. No. 3, p. 103.  
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1093. RILEY, C. V. The seventeen-year Cicada. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 55.  
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1094. RILEY, C. V. Death of a hen. <Rural New Yorker, ——— 1869, fig. S.-b. No. 3, p. 75.  
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1095. RILEY, C. V. Cut-worm eggs. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 81.  
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1096. RILEY, C. V. Potato bugs. <Prairie Farmer, ——— 1869. S.-b. No. 3, p. 81.  
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1097. RILEY, C. V. That glow-worm. <Cultivator and Country Gentleman, 6 January, 1870, v. 35, p. 5, fig. S.-b. No. 4, p. 23.  
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1098. [RILEY, C. V.] In memoriam. <Amer. Ent., December, 1869—January, 1870, v. 2, pp. 65–68.  
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1099. [RILEY, C. V.] The harlequin cabbage-bug, *Strachia histrionica*; Hahn. <Amer. Ent., December, 1869—January, 1870, v. 2, pp. 79–80, fig. 56.  
Enumeration of the enemies of the cabbage in the United States; methods of their injury; importation and spread of some species; figures of the imago; description of eggs, habits, geographical distribution, seasons, and odors of *Strachia* [= *Murgantia*] *histrionica*; extract from G. Lincecum's "Texan cabbage-bug."
1100. [RILEY, C. V.] An entomologist caught napping. <Amer. Ent., December, 1869—January, 1870, v. 2, p. 84.  
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1101. [RILEY, C. V.] Poisonous qualities of the Colorado potato-bug. <Amer. Ent., December, 1869—January, 1870, v. 2, pp. 85–86.  
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1102. [RILEY, C. V.] Insects injurious to the grape-vine. No. 4. <Amer. Ent., December, 1869—January, 1870, v. 2, pp. 89–90, figs. 58–59. Reprint, with slight changes: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 76–78, figs. 52–53.  
Treats of *Philampelus satellitia* [= *pandorus*]; see No. 1127 for synopsis of contents.

1103. [RILEY, C. V.] Toads *vs.* bugs. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 91.  
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1104. [RILEY, C. V.] The tomato-worm again. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 91-92.  
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1105. [RILEY, C. V.] Mr. Walsh's successor. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 92-93.  
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1106. [RILEY, C. V.] To our subscribers. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 93.  
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1107. [RILEY, C. V.] The Walsh entomological collection. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 93-94.  
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1108. [RILEY, C. V.] A State entomologist for Minnesota. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 94.  
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1109. RILEY, C. V. [Field for the entomologist in the South.] <Amer. Ent., v. 2, December, 1869-January, 1870, p. 94; February, 1870, p. 121.  
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1110. [RILEY, C. V.] On our table. <Amer. Ent., December, 1869-January, 1870, v. 2, pp. 95, 96.  
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1111. [RILEY, C. V.] Information wanted. <Amer. Ent., December, 1869-January, 1870, v. 2, p. 96.  
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1112. [RILEY, C. V.] The Cecropia moth, *Attacus cecropia*, Linn. <Amer. Ent., February, 1870, v. 2, pp. 97-102, fig. 59 [bis]-67.  
Descriptions and figures of larva, cocoon and imago of *Attacus cecropia*; figure of pupa; descriptions of egg and of young larva at its several stages; nomenclature, food-plants, and parasites; its value as a silk-worm; figures and descriptions of *Ophion macrurum*, *Exorista cecropia* n. sp., and *Chalcis* [= *Spilochalcis*] *maria* n. sp.; figure of larva of *Ophion macrurum* and of cocoons of *Cryptus nuncius*; habits of these parasites; *Exorista cecropia* considered a variety of *E. militaris* [= *Nemoræa leucania*].

1113. RILEY, C. V. Report of the committee on entomology. Read . . . before the Missouri State Horticultural Society. <Amer. Ent., February, 1870, v. 2, pp. 106-109. Reprint: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 5-8, 13-15.  
See No. 1127 for synopsis of contents.
1114. [RILEY, C. V.] Silk-worm eggs. <Amer. Ent., February, 1870, v. 2, p. 109.  
Seventy-eight packages of silk-worm eggs, valued at \$300 per package and weighing two tons, shipped from Yokohama to France via California and the Pacific Railroad.
1115. RILEY, C. V. Imported insects and native American insects. <Amer. Ent., February, 1870, v. 2, pp. 110-112, fig. 72-75. Reprint: <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 8-12.  
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1116. [RILEY, C. V.] The trumpet grape-gall, *Vitis viticola* O. S. <Amer. Ent., February, 1870, v. 2, pp. 113-114, fig. 76.  
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1117. [RILEY, C. V.] The goat-weed butterfly, *Paphia glycerium* Doubleday. <Amer. Ent., February, 1870, v. 2, pp. 121-123, figs. 81-83. Reprint, with slight changes. <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 124-128, figs. 94-96.  
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1118. [RILEY, C. V.] Insects injurious to the grape-vine. No. 5. <Amer. Ent., February, 1870, v. 2, pp. 123-124, fig. 84. Reprint, with slight changes. <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 78-79, fig. 54.  
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1119. [RILEY, C. V.] Scorpion in Kansas. <Amer. Ent., February, 1870, v. 2, p. 126.  
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1120. [RILEY, C. V.] The grain Bruchus of Europe just imported. <Amer. Ent., February, 1870, v. 2, pp. 126-127, fig. 85.  
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1122. [RILEY, C. V.] Eggs of snowy tree-cricket on raspberry canes. <Amer. Ent., February, 1870, v. 2, p. 128.  
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1123. [RILEY, C. V.] Spotted rove-beetle. <Amer. Ent., February, 1870, v. 2, p. 128.  
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1124. [RILEY, C. V.] Raspberry gouty gall. <Amer. Ent., February, 1870, v. 2, p. 128, fig. 90.  
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1125. [RILEY, C. V.] Parasitic cocoons. <Amer. Ent., February, 1870, v. 2, p. 128, fig. 91.  
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1127. RILEY, C. V. Second annual report on the noxious, beneficial, and other insects of the State of Missouri, made to the State Board of Agriculture, pursuant to an appropriation for this purpose from the legislature of the State. <5th Ann. Rept. State Board of Agric. for 1869, March, 1870, pp. 136 + 6, 99 figs. Separate: <Jefferson City, Mo., March, 1870, pp. 136 + 6, 99 figs.

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\* Extract in <Rept. State Board Agric., Kansas for 1873-74, pp. 129-131.



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## 1128. [RILEY, C. V.] Mr. Walsh's portrait. &lt;Amer. Ent., March, 1870, v. 2, p. 129.

Remarks accompanying the portrait of B. D. Walsh; resolutions passed on the death of Walsh by the London branch of the Entomological Society of Ontario; by the American Entomological Society, the Illinois State Horticultural Society, and by the Kansas State Horticultural Society.

1129. RILEY, C. V. The plum Curculio, *Conotrachelus nenuphar* Herbst. <Amer. Ent., March, 1870, v. 2, pp. 130–137, fig. 92.

Paper read before the Illinois State Horticultural Society at its 14th annual meeting; summary of established facts and discussion of mooted points in the life-history of *Conotrachelus nenuphar*; seasons, habits, transformations, food-plants, enemies of and means against the same; descriptions and figures of larva and imago; figure of pupa; hibernation and the effects of climate on the prolongation of the life of insects.

## 1130. RILEY, C. V. Insects injurious to the grape-vine. No. 6. &lt;Amer. Ent., March, 1870, v. 2, pp. 150–153, figs. 100–102. Reprint, with slight changes: &lt;2d Ann. Rept. State Ent. Mo., March, 1870, pp. 80–82, fig. 55.

Treats of *Alypia octomaculata*; see No. 1127 for synopsis of contents.

1131. [RILEY, C. V.] Pithy blackberry gall. <Amer. Ent., March, 1870, v. 2, pp. 159-160, fig. 103.  
Answer to inquiry of C. W. ["S. C."] Spaulding; descriptions and figures of larva and gall of *Diastrophus nebulosus*; figure of pupa; seasons, food-plant, guest-fly [*Periclistus sylvestris*], and parasite [*Eurytoma diastrophii*] and means against this species; the genus *Diastrophus* confined to *Rosa*, *Cynips* to *Cupuliferæ* and *Antistrophus* to *Compositæ*.
1132. [RILEY, C. V.] Clover-worms. <Amer. Ent., March, 1870, v. 2, p. 160.  
Answer to inquiry of G. Pauls; geographical distribution, food-habits, vernacular names and synonymy of and means against *Asopia costalis*.
1133. [RILEY, C. V.] Seed-ticks under bark of apple-trees. <Amer. Ent., March, 1870, v. 2, p. 160.  
Answer to inquiry of O. B. Galusha; character of insects as regards the number of legs; occurrence of *Ixodes unipunctata* under outer bark of apple-trees at Morris, Ill.
1134. [RILEY, C. V.] Parasitic cocoons. <Amer. Ent., March, 1870, v. 2, p. 160.  
Answer to inquiry of S. W. Beckworth; occurrence of a mass of cocoons of [*Microplitis ceratoniæ* var. *actuosus*] under red-oak at South Pass, Ill.
1135. [RILEY, C. V.] Is any knowledge useless? <Amer. Ent. and Bot., April, 1870, v. 2, pp. 164-166.  
Reprint of article from Manufacturer and Builder, November, 1869; minute investigations in science may be of great practical importance; cases in which a knowledge of life-history of *Galeruca californiensis* [= *xanthomelana*], *Conotrachelus nenuphar*, and *Lyceylon navale* was or might have been of great value.
1136. [RILEY, C. V.] Tomato fruit-worm. <Amer. Ent. and Bot., April, 1870, v. 2, p. 172.  
Notice of statement by J. J. Weir that *Heliothis armigera* was bred from larvæ which fed on the fruit of tomato in England; food-plants of this insect.
1137. RILEY, C. V. Insects injurious to the grape-vine. No. 7. <Amer. Ent. and Bot., April, 1870, v. 2, pp. 173-174, figs. 107-108.  
Reprinted, with slight changes, from <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 85-87, figs. 58-59.  
Treats of *Procris* [= *Harrisina*] *americana*; see No. 1127 for synopsis of contents.
1138. [RILEY, C. V.] The death web of young trout. <Amer. Ent. and Bot., April, 1870, v. 2, p. 174.  
Reprint, with review, of Seth Green's "An enemy to young trout;" young trout and young white-fish killed by the web of an unknown aquatic larva, probably one of the caddis-flies; habits of the larvæ of *Phryganeidæ*. See No. 1160.
1139. [RILEY, C. V.] "Scab" in apple v. apple-tree plant-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 178.  
Notes the freedom of apple-trees in 1870 from the eggs of *Aphis mali*, and the opportunity to test the question of the connection of these insects with the "scab."

1140. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., April, 1870, v. 2, p. 179.  
Answer to inquiry of M. Hobart; identification of several insects; food-plants of *Grapta comma*, *Geometra* [= *Zerene*] *catenaria*, *Serica vespertina*, and *Tetraopes 5-maculatus*; geographical distribution of *Grapta comma*; description of larva of *Epantheria scribonia*.
1141. [RILEY, C. V.] Supposed trout enemy. <Amer. Ent. and Bot., April, 1870, v. 2, pp. 179-180.  
Answer to inquiry of F. Mather; identification of several insects; habits and occurrence of *Capnia minima*; occurrence of *Piophilha casei* and *Pinus brunneus* at Honeye Falls, N. Y.
1142. [RILEY, C. V.] Food for trout. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of Seth Green and Collins; with knowledge of the character of the worms which forms a desirable food for young trout, it may be possible to suggest some method of propagating the worms artificially.
1143. [RILEY, C. V.] Hair-snakes. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of E. W. M.; parasitic habits, abodes and prolificacy, and classificatory relations of *Gordius varius* and *G. aquaticus*.
1144. [RILEY, C. V.] Egg-sack of some unknown spider. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of A. Engelmann; figure of egg-sack of *Epeira* sp.?
1145. [RILEY, C. V.] Do worker bees sting the drones to death? <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of M. W. V.; there is no good reason to doubt that worker bees sting the drones to death when the mission of the latter is ended.
1146. [RILEY, C. V.] Red spider. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of R. H. Warder; *Trombidium* [= *Tetranychus*] *telarius* imported from Europe; size, color, and abodes of and means against the same.
1147. [RILEY, C. V.] Insect named. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of M. Barrett; food-habits of *Psocus venosus* and other *Psocida*.
1148. [RILEY, C. V.] To destroy plant-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 180.  
Answer to inquiry of B. F. Lazear; means against *Aphididae* on house plants.
1149. [RILEY, C. V.] Raspberry root gall. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181, fig. 110.  
Answer to inquiry of K. Parsons; description and figure of gall of *Rhodites radicum* occurring on roots of *Rosaceae*; genera of parasites raised from it; interest of the question of the manner and extent of parasitization of this gall.
1150. [RILEY, C. V.] Spined slug-worm. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181.  
Answer to inquiry of L. G. Saffer and A. R. Bodley; brief description of the larva of *Limacodes* sp.

1151. [RILEY, C. V.] Apple-tree insects. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181.  
Answer to inquiry of L. Camfield; identification of specimens and directions for the destruction of *Orgyia leucostigma* and *Phycita nebulo* [= *Acrobasis indiginella*].
1152. [RILEY, C. V.] Native apple-tree bark-lice. <Amer. Ent. and Bot., April, 1870, v. 2, p. 181, fig. 111.  
Answer to inquiry of A. C. Hammond; food-plants of and means against *Diaspis harritii* [= *Chionaspis furfurus*]; figure of infested twig of apple; the presence of enemies and parasites prevent this species becoming a formidable pest.
1153. [RILEY, C. V.] The hedge-hog caterpillar. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182, fig. 112.  
Answer to inquiry of H. Burt; descriptions and figures of larva and imago of *Arctia* [= *Pyrharcia*] *isabella*; figure of pupa and cocoon; habits and hibernation; its larva and that of *Epantheria scribonia* called "fever-worm," and ignorantly supposed to cause malarial fevers; food-habits of *Horinus* [= *Merinus*] *lævis*.
1154. [RILEY, C. V.] Chick-weed Geometer. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.  
Answer to inquiry of J. Huggins; identification of specimens; reference to account of *Hamatopsis grataria*; *Cermatia forceps* common in houses in the latitude of St. Louis, Mo.; the sulphur remedy for canker-worms absurd.
1155. [RILEY, C. V.] Bean-weevil. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.  
Answer to inquiry of G. W. Copley; specimens identified; occurrence and ravages of *Bruchus obsoletus* in Illinois.
1156. [RILEY, C. V.] Bag-worm at South Pass, Ill. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.  
Answer to inquiry of G. H. Baker; occurrence of *Thyridopteryx ephemera-formis* at South Pass, Ill.; importance of its destruction.
1157. [RILEY, C. V.] Eggs of oblong-winged katy-did. <Amer. Ent. and Bot., April, 1870, v. 2, p. 182.  
Answer to inquiry of E. D. Ladd; differences between the eggs of *Phylloptera* [= *Amblycorypha*] *oblongifolia* and those of *Platyphyllum* [= *Cyrtophyllus*] *concavus*; the former occur on currant and various trees.
1158. [RILEY, C. V.] Insects injurious to the grape-vine. No. 8. <Amer. Ent. and Bot., May, 1870, v. 2, pp. 208-209, fig. 127.  
Reprint, with slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 61-63, fig. 24.  
Treats of *Desmia maculalis*; see No. 1301 for synopsis of contents.
1159. [RILEY, C. V.] The periodical Cicada alias the 17-year and 13-year locust. <Amer. Ent. and Bot., May, 1870, p. 211.  
Quotes, from the 1st Ann. Rept. State Ent. Mo., the localities in which *Cicada* [= *Tibicen*] *septendecim* and *C.* [= *T.*] *tredecim* will appear in 1870, with request for reports of the occurrence of these insects.
1160. [RILEY, C. V.] The death-web of young trout. <Amer. Ent. and Bot., May, 1870, v. 2, p. 211.  
Supplementary to No. 1138; the larvæ mentioned belong to the genus *Stellium*.

1161. [RILEY, C. V.] Worms under mulch hay. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.  
Answer to inquiry of J. F. Flagg; description, season, habits, and ravages of and means against the larvæ of *Tipula* sp.
1162. [RILEY, C. V.] A new pear-tree insect. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212, fig. 129.  
Answer to inquiry of E. J. Ayres; food-habits and ravages of and means against *Platycerus quercus*; figure of imago.
1163. [RILEY, C. V.] Apple-twigg borer. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.  
Answer to inquiry of J. B. Myers; *Bostrichus* [= *Amphiderus*] *bicaudatus* bores into the axil of limbs of pear-trees.
1164. [RILEY, C. V.] Cocoons of polyphemus moth. <Amer. Ent. and Bot., May, 1870, v. 2, 212.  
Answer to inquiry of H. J. Dunlap; cocoon of *Attacus* [= *Teles*] *polyphemus* found on Morello cherry-tree.
1165. [RILEY, C. V.] Galls on supposed dock. <Amer. Ent. and Bot., May, 1870, v. 2, p. 212.  
Answer to inquiry of S. V. Summers; *Gelechia gallæ-solidaginis* forms galls on stems of *Solidago*; *Gastrophysa* [= *Gastroidea*] *cyanea* breeds on *Rumex*.
1166. [RILEY, C. V.] Mossy rose-gall. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213, fig. 130.  
Answer to inquiry of W. M. Locke; description of gall, larva, and imago of *Rhodites rosæ*; figure of the gall; description of a parasitic larva.
1167. [RILEY, C. V.] Punctures on the rose-twigg. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213, fig. 131.  
Answer to inquiry of G. W. Copley; punctures in rose-stem; eggs, probably of a cricket, imbedded in pith of the same; description of the egg and figure of injured stem.
1168. [RILEY, C. V.] Snout-beetle. <Amer. Ent. and Bot., May, 1870, v. 2, p. 213.  
Answer to inquiry of Mary Treat; *Hyllobius confusus* a timber borer and usually in pine.
1169. [RILEY, C. V.] The oyster-shell bark-louse in Missouri. <Amer. Ent. and Bot., May, 1870, v. 2, pp. 213-214, fig. 132.  
Answer to inquiry of B. P. Hanan; occurrence of *Aspidiotus conchiformis* [= *Mytilaspis pomorum*] in Missouri; importance of the thorough extirpation of the insect; figure of a piece of bark infested by the same.
1170. [RILEY, C. V.] The pod-like willow-gall. <Amer. Ent. and Bot., May, 1870, v. 2, p. 214, fig. 133.  
Answer to inquiry of J. R. Muhleman; description and figure of the gall of *Cecidomyia salicis-siliqua*; figure of larva; food-plants, synonymy, and description of the pupa of the same.
1171. [RILEY, C. V.] Bee-nest. <Amer. Ent. and Bot., 1870, v. 2; May, p. 214, fig. 134; September, p. 307.  
Answer to inquiry of J. R. Muhleman; description and figure of larva of *Proctopsis affinis* in hot, low currant-stem; probability that *Ceratina dupla* breeds twice a year.



1172. [RILEY, C. V.] Beetles named. <Amer. Ent. and Bot., May, 1870, v. 2, p. 214.  
Answer to inquiry of S. V. Summers; specimens identified; difference between *Canthon lavis* and *C. chalcites*.
1173. [RILEY, C. V.] Great discovery: Curculio extermination possible! <Amer. Ent. and Bot., June, 1870, v. 2, pp. 225-227.  
Notice: <Cultivator and Country Gentleman, 9 June, 1870, v. 35, p. 361.  
Reprint of articles by J. E. Chamberlain and Mrs. H. Wier on the destruction of the Curculio; letter from W. B. Ransom; criticism of the same; means against *Conotrachelus nenuphar*; distinctions between *C. nenuphar* and *Anthonomus quadrigibbus*.
1174. [RILEY, C. V.] The death-web of young trout. <Amer. Ent. and Bot., June, 1870, v. 2, pp. 227-228, figs. 143-144.  
Value and progress of fish-culture; habits of *Simulium piscicidium*, with the observations of Seth Green and Sara J. McBride; figures larva and pupa of *S. piscicidium* and the imago of *S. molestum*.
1175. [RILEY, C. V.] Insects injurious to the grape-vine. No. 9. <Amer. Ent. and Bot., June, 1870, v. 2, pp. 234-235, fig. 148. Reprint, with slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 65-68, fig. 27.  
Treats of *Pterophorus* [= *Oxyptilus*] *periscelidactylus*; see No. 1301 for synopsis of contents.
1176. [RILEY, C. V.] The apple Curculio. <Amer. Ent. and Bot., June, 1870, v. 2, p. 243, fig. 152.  
Figures of the imago of *Anthonomus quadrigibbus*.
1177. [RILEY, C. V.] The new Curculio remedy. <Amer. Ent. and Bot., June, 1870, v. 2, p. 243.  
Results of experiments in the use of Ransom chip-trap for *Conotrachelus nenuphar*.
1178. [RILEY, C. V.] Tarantula of Texas. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244.  
Answer to inquiry of L. J. Stroop; the figure of *Mygale hentzii* given in volume one is somewhat incorrect.
1179. [RILEY, C. V.] Ailanthus silk-worm naturalized. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244.  
Answer to inquiry of A. S. Fuller; introduction and naturalization of *Attacus Cynthia*.
1180. [RILEY, C. V.] Cypress-gall. <Amer. Ent. and Bot., June, 1870, v. 2, p. 244, fig. 153.  
Answer to inquiry of J. P. Stelle; description and figures of gall and description of gall and imago of *Cecidomyia cypressi-ananassa* n. sp. on cypress; figures breast-bone of the larva.
1181. [RILEY, C. V.] Tent-caterpillar of the forest. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.  
Answer to the inquiries of A. M. Brown and J. H. Evans; habits, food-plants, and ravages of *Clisiocampa sylvatica* [= *diastria*] and *C. americana*.

1182. [RILEY, C. V.] Worm-boring into peach. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.  
Answer to inquiries of W. C. Flagg, A. C. Hammond, and M. M. Hooton; food-plants and description of larva of *Xylina cinerea* [= *Lithophane antennata*].
1183. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.  
Answer to inquiry of A. Engelman; descriptions of *Smilia auriculata* and *Membracis ampelopsidis*; both species common on grape-vines.
1184. [RILEY, C. V.] Lice on "snow-balls. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.  
Answer to inquiry of Mrs. C. L. Seymour; means against *Aphididae*.
1185. [RILEY, C. V.] Twig-borer. <Amer. Ent. and Bot., June, 1870, v. 2 p. 245, fig. 154.  
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1186. [RILEY, C. V.] Bee enemy. <Amer. Ent. and Bot., June, 1870, v. 2, p. 245.  
Answer to inquiry of F. Brewer; *Staphylinus maculosus*, found eating a bee, is rather a scavenger than an insect of prey.
1187. [RILEY, C. V.] Knots on apple-tree roots caused by root-lice. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of B. N. McKinstry; ravages of and means against *Schizoneura lanigera* on roots of young apple-trees.
1188. [RILEY, C. V.] Beetles named. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of W. W. Daniells; *Ithycerus noveboracensis* injures apple-leaves.
1189. [RILEY, C. V.] Bag-worm. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of M. M. Hooten; occurrence of young larva of *Thyridopteryx ephemeraformis* on peach-trees; manner in which they carry their cases.
1190. [RILEY, C. V.] The larder-beetle. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of S. H. Kriedelbaugh; food-habits and description of the larva and imago of *Dermestes lardarius*.
1191. [RILEY, C. V.] Water-bug. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of W. H. Harrington; habits and description of *Ranatra fusca*.
1192. [RILEY, C. V.] Gregarious worms on horse-chestnut. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of W. R. Howard; oviposition, food-plant, and parasite of *Tortrix* [= *Cacoccia*] *rileyana*.
1193. [RILEY, C. V.] Pupa of the disippus butterfly. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246, fig. 155.  
Answer to inquiry of T. Montgomery; figure and colors of pupa of *Limenitis disippus*; food-plants and hibernations of larva.

1194. [RILEY, C. V.] Prickly-rose gall. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of J. Cochrane and J. P. Stelle; brief description of the gall of *Rhodites bicolor* on wild rose.
1195. [RILEY, C. V.] Insects feeding on sap of black-walnut. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of M. Barrett; food-habits of *Psocus venosus*.
1196. [RILEY, C. V.] Locust-borer, <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of "Arbor;" means against *Arhopalus* [= *Cyllene*] *robiniae*.
1197. [RILEY, C. V.] To exterminate cockroaches. <Amer. Ent. and Bot., June, 1870, v. 2, p. 246.  
Answer to inquiry of R. F. Weitbree; means against cockroaches.
1198. [RILEY, C. V.] The white-lined morning Sphinx. (*Deilephila lineata*, Fabr.) <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 257-258, figs. 162-164. Reprint, with additions and slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 140-142, figs. 60-62.  
Treats of *Deilephila lineata*; see No. 1301 for synopsis of contents.
1199. [RILEY, C. V.] Descriptive entomology. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 258-261. Abstract: <Cultivator and Country Gentleman, 6 April, 1871, v. 36, p. 218.  
Critical review of a remark by J. A. Lintner; calculation of the cost, labor, and extent of a work containing the description and figure of every existing species of insect.
1200. [RILEY, C. V.] The tent-caterpillar of the forest. (*Clisiocampa sylvatica*, Harr.) <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 261-266, figs. 165-168. Reprint, with additions and slight changes: <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 121-129, figs. 52-54.  
Treats of *Clisiocampa sylvatica* [= *disstria*]; see No. 1301 for synopsis of contents.
1201. [RILEY, C. V.] The Ransom Curculio remedy. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 268-271.  
Discussion of the efficacy of the Ransom chip-trap against *Conotrachelus nenuphar*; extracts from and criticism of articles by E. S. Hull, W. B. Ransom, and others on this subject.
1202. [RILEY, C. V.] Insects injurious to the grape-vine. No. 10. <Amer. Ent. and Bot., July-August, 1870, v. 2, pp. 272-273, fig. 170. Reprint, with additions and slight changes. <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 68-69, fig. 28.  
Treats of *Spilosoma virginica*; see No. 1301 for synopsis of contents.
1203. [RILEY, C. V.] The Walsh entomological cabinet. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Remarks on the purchase and disposal of the entomological collection of B. D. Walsh.

1204. [RILEY, C. V.] The currant-worm! <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Comments upon the confusing way in which some horticultural publications treat of the currant-worm, without discrimination of species.
1205. [RILEY, C. V.] Water larva. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Answer to inquiry of F. Mather; habits of the larvæ of *Ephemera*.
1206. [RILEY, C. V.] Large black potato-beetles. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Answer to inquiry of R. S. Elliott; *Epicauta corvina*? injuring potato-vines in Kansas.
1207. [RILEY, C. V.] Destroying cherry plant-lice. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Answer to inquiry of G. C. Brackett; means against *Myzus cerasi*.
1208. [RILEY, C. V.] Caterpillars on grape-vines. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Answer to inquiry of G. A. Watson; larvæ of *Alypia octomaculata* and *Aerenycta oblongata* found on grape-vines; food-plants of the latter species.
1209. [RILEY, C. V.] Ash-gray blister-beetle. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 275.  
Answer to inquiry of P. H. Foster; *Lytta cinerea* [= *Macrobasis unicolor*] feeding on the three-thorned Acacia.
1210. [RILEY, C. V.] Specimens lost. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of C. H. Roberts; food-habits and description of larva of *Gortyna nitela* and of an undetermined moth on peach-trees.
1211. [RILEY, C. V.] White willow worm. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of S. H. K.; food-plants and description of larva of and means against *Nematus ventralis*.
1212. [RILEY, C. V.] Bark-lice on grape-vine and raspberry saw-fly. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of S. Thompson; *Lecanium* [= *Pulvinaria*] *vitis* common on grape-vines in Europe and North America; its oviposition and occurrence in Illinois; description and means against the larva of *Selandria* [= *Monophadnus*] *rubi*.
1213. [RILEY, C. V.] Apple-tree borer; variations in the two-striped *Saperda*. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of D. B. Wier; colorational variations in *Saperda bivittata* [= *candida*]; abundance and ravages of *Capsus oblineatus* [= *Lygus pratensis*].
1214. [RILEY, C. V.] The plum Carculio breeds in apple. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer inquiry of E. Leming; *Conotrachelus nenuphar* breeds in the fruit of apple.

1215. [RILEY, C. V.] Cecropia worm. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of J. F. Thompson; occurrence and ravages of the larva of *Attacus cecropia* on apple-trees.
1216. [RILEY, C. V.] Gigantic rhinoceros beetle. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of L. G. Saffer; variations in coloration of *Dynastes tityus*.
1217. [RILEY, C. V.] Roman-nosed pupa. <Amer. Ent. and Bot., July-August, 1870, v. 2, p. 276.  
Answer to inquiry of E. D. Van Winkle; food-habits of *Limenitis ureula* and *L. disippus*; the pupæ of the two species are alike.
1218. [RILEY, C. V.] The onward march of the Colorado potato-beetle. A word to our Canadian neighbors. <Amer. Ent. and Bot., September, 1870, v. 2, pp. 289-291, fig. 181.  
Remarks on the spread of *Doryphora decemlineata* into Ontario, and means of checking it; efficacy and proper use of Paris green; other remedies; *Lebia grandis* a natural enemy of the larvæ.
1219. [RILEY, C. V.] The tarnished plant-bug. (*Capsus oblineatus*, Say). <Amer. Ent. and Bot., September, 1870, v. 2, pp. 291-293, fig. 182. Reprinted, with additions and slight changes, from <2d Ann. Rept. State Ent. Mo., March, 1870, pp. 113-115, fig. 83.  
Treats of *Capsus oblineatus* [= *Lygus pratensis*]; see No. 1127 for synopsis of contents.
1220. [RILEY, C. V.] Osage orange for the mulberry silk-worm. <Amer. Ent. and Bot., September, 1870, v. 2, p. 293.  
Reprint and critical review of S. Cornaby's article on the above; important articles should not be published anonymously.
1221. [RILEY, C. V.] Insects injurious to the grape-vine. No. 11. <Amer. Ent. and Bot., September, 1870, v. 2, p. 295, fig. 185.  
Reprint with slight changes. <3d Ann. Rept. State Ent. Mo., April, 1871, pp. 77-79, fig. 34.  
Treats of *Pelidnota punctata*; see No. 1301 for synopsis of contents.
1222. [RILEY, C. V.] The slug on pear and cherry trees. <Amer. Ent. and Bot., September, 1870, v. 2, p. 296.  
Reprint and critical review of "Addi" on the above; ravages of and means against *Selandria* [= *Eriocampa*] *cerasi*.
1223. [RILEY, C. V.] Appendix to joint-worm article published in vol. 1, No. 8 <Amer. Ent. and Bot., September, 1870, v. 2, pp. 296-297.  
Introduction to and explanation of the preparation and publication of Walsh's *Eurytomides*. See No. 384.
1224. [RILEY, C. V.] Entomology indeed run mad! <Amer. Ent. and Bot., September, 1870, v. 2, p. 305.  
Critical review of Mark Miller's article on the currant-worm; *Nematus ventricosus* [= *ribesii*] confounded with *Eufstchia ribearia*.
1225. [RILEY, C. V.] Red spider. <Amer. Ent. and Bot., September, 1870, v. 2, p. 305.  
Ravages and transformations of *Tetranychus telarius*.

1226. [RILEY, C. V.] Insects named. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.  
 Answer to inquiry of J. K. Kidd; food-habits of *Silpha peltata* [= *americana*] and allied forms, of *Calosoma scrutator* and of *Laphria* [= *Dasyllis*] *thoracica*; mimicry between *Laphria* and *Bombus* and its use.
1227. [RILEY, C. V.] Caterpillar of white-marked tussock moth. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306, fig. 186.  
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1228. [RILEY, C. V.] Does the apple Curculio go underground to transform? <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.  
 Answer to inquiry of W. Muir; *Anthonomus quadrigibbus* transforms within the fruit; it does not attack stone fruit.
1229. [RILEY, C. V.] Walnut caterpillars. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306.  
 Answer to inquiry of G. M. Levette; seasons, habits, and food-plant of and means against *Datana ministra*; description of larva.
1230. [RILEY, C. V.] Striped blister-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 306, fig. 187.  
 Answer to inquiry of A. Galt; means against *Epicauta vittata* and other *Meloidæ* on potato vines; figure of *Epicauta vittata*.
1231. [RILEY, C. V.] Grape-vine Fidia. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307, fig. 188.  
 Answer to inquiry of J. Hetzel; habits, ravages, and food-plants of and means against *Fidia vitticida*; figure of this species.
1232. [RILEY, C. V.] Some interesting insects. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.  
 Answer to inquiry of A. S. Fuller; ravages of *Bruchus obsoletus* in Lima beans; of *Bupalis cerealella* in flint corn in stems and of *Lobesia* [= *Eudemis*] *botrana* in blossoms of blackberry; description of the larva case of *Phycita nebulo* [= *Acrobasis indiginella*] and of galls of *Cecidomyia tubicola* on *Carya*.
1233. [RILEY, C. V.] The green hag-moth. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.  
 Answer to inquiry of S. B. Shaw; food-plants, and synonymy of *Callochloa viridis* [= *Parasa chloris*]; description of larva and imago; the larva described by Reakirt does not belong to this species.
- 1234. [RILEY, C. V.] The antiopa butterfly. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.  
 Answer to inquiry of A. S. Moss; description of larva and imago of *Vanessa antiopa*; the larva feeds on willow; vernacular name and comparative abundance.
1235. [RILEY, C. V.] Rose-gall and pupa of archippus butterfly. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307, fig. 189.  
 Answer to inquiry of L. B. Custar; figure of pupa of *Danaus archippus*; descriptions of three undetermined galls on rose-leaf formed by *Rhodites* sp.?

1236. [RILEY, C. V.] White grubs in strawberry beds. <Amer. Ent. and Bot., September, 1870, v. 2, p. 307.  
Answer to inquiry of J. B. Miller; food-habits of larva and description of imago of *Cyclocephala immaculata*.
1237. [RILEY, C. V.] Larva of the thoas swallow-tail <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
Answer to inquiry of E. H. Sprague; food-plant and description of larva of *Papilio thoas* [= *oresphontes*]; the larva rare in Missouri.
1238. [RILEY, C. V.] Larva of clubbed tortoise-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
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1239. [RILEY, C. V.] The banded Ips in calyx of pear. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
Answer to inquiry of G. C. Brackett; food-habits and description of *Ips fasciatus*.
1240. [RILEY, C. V.] The larder-beetle. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308, fig. 191.  
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1241. [RILEY, C. V.] Moth named. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
Answer to inquiry of E. M. Hale; description of *Ctenucha latreillana* [= *virginica*]; its abundance in 1870 in the vicinity of St. Louis, Mo.
1242. [RILEY, C. V.] The little Cicada. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
Answer to inquiry of G. O. Hardeman; occurrence of *Cicada* [= *Melampsalta*] *parvula* in Missouri.
1243. [RILEY, C. V.] The brown mantispian. <Amer. Ent. and Bot., September, 1870, v. 2, p. 308.  
Answer to inquiry of G. C. Brackett; *Mantispa brunnea* common, predaceous, and beneficial.
1244. [RILEY, C. V.] Small reddish snout-beetle on apple. <Amer. Ent. and Bot., September, 1870, v. 2, p. 30.  
Answer to inquiry of J. Weed; food-habits and description of *Anthonomus orategi*.
1245. [RILEY, C. V.] Prickly rose-gall. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309, fig. 192.  
Answer to inquiry of "Subscriber;" description and figure of galls and description of *Rhodites bicolor*.
1246. [RILEY, C. V.] Questions answered. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.  
Answer to inquiries of K. Parsons; formation and use of portable cases by *Tineina*; habits and character of the young of *Mytilaspis pomicorticis* [= *pomorum*]; food-habits of ants.

1247. [RILEY, C. V.] Hog-caterpillar of the vine infested with parasites. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.  
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1248. [RILEY, C. V.] Larva of Abbot Sphinx. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.  
Answer to inquiry of S. E. Todd; occurrence of larva of *Thyreus abbotii* on grape-vine; means against the same.
1249. [RILEY, C. V.] Cecropia worm. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.  
Answer to inquiry of E. G. Hofman; occurrence of *Athicus cecropia* on plum.
1250. [RILEY, C. V.] Flat-headed borer in soft maples. <Amer. Ent. and Bot., September, 1870, v. 2, p. 309.  
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## 1330. RILEY, C. V. New York without a State entomologist. &lt;Moore's Rural New Yorker, 5 May, 1873. S.-b. No. 8, p. 103.

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## 1331. RILEY, C. V. Tent-caterpillar of the forest. &lt;N. Y. Tribune, 23 May, 1873. S.-b. No. 8, pp. 64-65.

Answer to inquiry of S. T. Gilbert; means against eggs of *Clisiocampa sylvatica* [= *disstria*].

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1337. RILEY, C. V. Supplementary notes on *Pronuba yuccasella*. <Trans. Acad. Sci. St. Louis, June, 1873, v. 3, pp. 178-180, fig. 3. Extract: <6th Ann. Rept. State Ent. Mo., April, 1874, pp. 131-135, fig. 3.

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1338. RILEY, C. V. [To destroy the cotton-worm.] <Ill. Jour. of Agric., June, 1873. Reprint: <Colman's Rural World, 1873; <Rural Alabamian, July, 1873, v. 2, pp. 289-293; <Mobile Register, 1873; <Farmer's Advocate, 1873. Extract: <6th Ann. Rept. State Ent. Mo., 1874, pp. 17-18.

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Critical review of J. Stayman's article on same subject; proper width and depth of ditches to check the march of unfledged *Caloptenus spretus* and other locusts.
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Answer to letter of R. Barbour; directions for the use of Paris green as a means against *Doryphora decemlineata*.
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Verbal communication; critical review of answer of Mayor Brown to inquiries of A. C. Hardy de Boislieu as to the means of preventing the introduction of *Doryphora decemlineata* into Belgium; quotes the 6th Ann. Rept. State Ent. Mo., p. 16, showing that the fear of such introduction is not unfounded; inaccuracy of Mayor Brown's opinions; manner in which *Doryphora decemlineata* will probably reach Europe if at all.
1492. RILEY, C. V. [On the ravages of young locusts in western Missouri.] <Trans. Acad. Sci. St. Louis, June, 1876, v. 3, pp. 179-180 Proc.  
Verbal communication; alarming nature of the ravages of unfledged *Caloptenus spretus* in western counties of Missouri at the present time; probable future departure of the winged locusts: means to be adopted against the locusts now.

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Brief abstract of lecture; prediction of the speedily approaching end of the ravages of *Caloptenus spretus* in Missouri for 1875; plentiful crops to be expected subsequently.
1494. RILEY, C. V. [Predictions verified.] <Trans. Acad. Sci. St. Louis, June, 1876, v. 3, p. 185 Proc.  
Verbal communication; accuracy of author's conclusions as to the probable doings of *Caloptenus spretus* in Missouri later in the season.
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See: <Amer. Nat., February, 1876, v. 10, p. 125.  
Verbal communication; remarks on the extraordinary development of *Vitis rotundifolia* for a season after the ravages of *Caloptenus spretus* have occurred an illustration of "the struggle for existence;" the interesting character of such instances of abnormal multiplication of a species; criticism and defense of the expressions "struggle for existence" and "natural selection."
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Description of the seeds (of an unknown plant) which are inhabited by the larvæ of *Carpocapsa saltitans*; manner in which these larvæ cause the seeds to roll and jump; habits of larva within the seed; description of the plant bearing the seeds; the seed of *Tamariscus* moved by the larva of *Nanodes tamarisci*, which feeds within it; description of the gall of *Cynips* [= *Nesoterus*] *quercus-saltatorius* and of the jumping of these galls.
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*Drosera*, *Dionaea* and other plants digest, absorb, and appropriate nitrogenous matters; glands for the appropriation of animal food not yet found in the *Sarracenias*.
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Bees in California infested with triungulins of a *Meloe* sp. which sometimes kill the bees; usual habits of such triungulins.

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Effects of water and cold on the eggs of *Caloptenus spretus*.
1502. RILEY, C. V. Swallows; bed bugs. <Colman's Rural World, 5 July, 1876. S.-b. No. 10, p. 166.  
Answer to letter of R. R. Pierce; nests of *Hirundo fulva* generally infested by *Acanthia lectularia*; those of *Hirundo americana* rarely so; while this habit might cause annoyance about a dwelling, it is of little consequence when the bird nests under the eaves of a church.
1503. [RILEY, C. V.] Berry and cherry twigs. <N. Y. Tribune, 5 July, 1876. S.-b. No. 10, p. 169.  
Answer to letter of W. Keyser; eggs of *Eoanthus niveus* laid in twigs of *Rubus* and *Prunus*; description, habits of, and means against *Oberca tripunctata*.
1504. RILEY, C. V. Three worms and their work. <N. Y. Weekly Tribune, 12 July, 1876, 2 figs. S.-b. No. 14, p. 132.  
Answer to letter of "Subscriber;" means against larvæ of *Agrotididae*, of *Elatridæ*, and earth worms, *Lumbricus* sp.; eggs of *Agrotis ypsilon* laid in the spring; breeding-habits and economic importance of *Lumbricus*; figures of an elatrid larva and imago.
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Ectoparasitism of a gamasid mite [*Uropoda americana*] on *Doryphora decemlineata*; list of vertebrate enemies of *D. decemlineata*.  
The reprints note the occurrence of *D. decemlineata* in New Hampshire and its ravages along the Atlantic coast. See No. 1610.
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Quotes from 1st Ann. Rept. State Ent. Mo., pp. 159-161; wheat injured in Nebraska in 1876 by *Cecidomyia destructor* and *Meromyza americana*; ravages of larva, description of imago and means against the latter; occurrence of *Disonychia flaviventris* in Nebraska.
1507. RILEY, C. V. A new enemy of wheat. <N. Y. Tribune, 21 July, 1876. S.-b. No. 14, pp. 129-130; 130-131.  
Answer to letter of W. Robson; occurrence, habits, and ravages of *Leucania albilinea* in Maryland, Pennsylvania, and Kansas; history and description of larva, pupa, and imago of the insect; evolution of new habits and forms among insects.
1508. [RILEY, C. V.] Chinch-bug; bee-moth. <Colman's Rural World, 26 July, 1876. S.-b. No. 10, pp. 201-205.  
Answer to letter of G. R. Christian; means against *Blissus leucopterus* and *Galleria cerasana*; food, seasons, habits, and description of the latter.
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Answer to letter of F. J. Kron; experiments on means against *Ageria* [= *Sciapteron*] *polistiformis*; habits of larva; figures of imago; geographical distribution.

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Answer to letter of W. Snowden; characters and habits of *Cassidida*; description and figures of larvæ and imago of *Coptocycla* [= *Cassida*] *bivittata* and *C.* [= *C.*] *nigripes*; descriptions of *C. aurichalcea* and *C. guttata*; these species feed on leaves of *Ipomœa batatas* and *C. aurichalcea*, also on leaves of *Convolvulus* and of *Solanum dulcamara*; means against them.
1511. [RILEY, C. V.] Those centennial insects. <N. Y. Weekly Tribune, 26 July, 1876. S.-b. No. 10, p. 219.  
Criticism of communication of L. A. M.; list of principal insects preying upon stored corn.
1512. RILEY, C. V. Wheat midge; "rue-worms." <N. Y. Tribune, 2 August, 1876. S.-b. No. 10, p. 202.  
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1513. RILEY, C. V. Apple and peach borers. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, pp. 3-4; 55-56. Extract: <Cultivator and Country Gentleman, 7 September, 1876, v. 41, p. 566.  
Answer to inquiries of F. H.; *Chrysobothris femorata* distinguished from *Saperda bivittata* [= *candida*] and *Egeria* [= *Sannina*] *exitiosa*; habits and description of the first; habits of the last and means against both.
1514. RILEY, C. V. Large saw-fly. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, p. 4.  
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1515. RILEY, C. V. Cottony scale-insect on maples. <Colman's Rural World, 9 August, 1876. S.-b. No. 14; pp. 4-5.  
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1516. RILEY, C. V. Hickory vs. locust borer. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, p. 5.  
Answer to inquiry of F. M. D.; description of larva and imago and natural history of *Arhopalus* [= *Cyllene*] *pictus*; characters distinguishing this from *A.* [= *C.*] *robinia*; food-plants and seasons of the latter.
1517. RILEY, C. V. Stag-beetle. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, p. 5.  
Answer to inquiry of S. Lee; occurrence and characters of *Lucanus elaphus*; food of larva.
1518. RILEY, C. V. Eggs of the angular-winged katydid. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, p. 5.  
Answer to inquiry of V. Kriegel; descriptions of eggs, imagoes, and song of *Microcentrum retinerve*; habits and ravages and means against the same.
1519. RILEY, C. V. Experience with the Colorado potato-beetle. <Colman's Rural World, 9 August, 1876. S.-b. No. 14, p. 6.  
Letter from N. Coleman; larvæ of *Doryphora decemlineata* in confinement pupated on the surface of the ground; imagoes eat the tubers underground.

1520. [RILEY, C. V.] An elm enemy. <N. Y. Semi-weekly Tribune, 11 August, 1876. S.-b. No. 14, pp. 54-55.  
Habits and ravages of and means against *Galeruca californiensis* [= *xanthomela*].
1521. RILEY, C. V. The locust in 1876. <N. Y. Weekly Tribune, 16 August, 1876. S.-b. No. 14, p. 73.  
The occurrence and ravages of *Caloptenus spretus* in Minnesota and Colorado in 1876; their absence from other portions of the country occasionally inhabited by them; their destruction by *Astoma gryllaria* [= *Trombidium locustarum*] and inability to maintain themselves in parts of the region they infest.
1522. [RILEY, C. V.] The war on "corn-worms." <N. Y. Semi-weekly Tribune, 18 August, 1876. S.-b. No. 14, p. 73.  
Review of article by A. Brewster; ravages of and means against larvæ of *Elateridæ*, *Agrotidæ* and *Lachnosterna quercina* [= *fusca*] and the "grub-worm," injurious to growing maize.
1523. RILEY, C. V. Spined soldier-bug. <Ohio Farmer, 19 August, 1876, v. 50, p. 118.
1524. RILEY, C. V. "Potato-pest poison." <Sci. Amer., 19 August, 1876 [v. 49], n. s., v. 35, p. 116.  
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1525. RILEY, O. F. Cottonwood borers. <N. Y. Weekly Tribune, 23 August, 1876. S.-b. No. 14, p. 55.  
Answer to inquiry of J. R.; food-plants and ravages of and means against *Plectrodera scalator*.
1526. RILEY, C. V. Harmless insects. <N. Y. Weekly Tribune, 23 August, 1876. S.-b. No. 14, p. 55.  
Answer to letter of a "Subscriber;" occurrence of *Pecorus venosus* on apple-trees; habits and molting.
1527. RILEY, C. V. Locust prospects. <N. Y. Tribune, 6 September, 1876. S.-b. No. 10, pp. 213-215; No. 14, pp. 74-75. Reprint: <Prairie Farmer, 16 September, 1876, v. 47, p. 298. S.-b. No. 10, pp. 207-209.  
Answer to letter of G. H. H.; movements and ravages of *Caloptenus spretus* in Aug., 1876, in Dakota, Minnesota, Iowa, Nebraska, and Colorado.
1528. RILEY, C. V. Some notes on potato-beetles. <Sci. Amer., 9 September, 1876 [v. 49], n. s., v. 35, p. 164. Reprint: <Ohio Farmer, 16 September, 1876, v. 50, p. 179. S.-b. No. 14, pp. 6, 7.  
Critical review of S. R. M.'s "Facts about potato-beetles;" *Doryphora decemlineata* flies in the day-time, but not at night; feeds upon several species of plants; hibernates as an imago, which should be destroyed in early spring.
1529. RILEY, C. V. Entomological works wanted. <Colman's Rural World, 20 September, 1876. S.-b. No. 14, p. 2.  
Answer to letter of J. W. Newman; notice of some works on entomology for the use of students.

1530. [RILEY, C. V.] Grape-leaf Phylloxera enemy. <Colman's Rural World, 20 September, 1876. S.-b. No. 14, p. 3.  
Answer to letter of A. Engleman; *Leucopis* sp. ♀ parasitic in galls of *Phylloxera vastatrix* and *P. rileyi*.
1531. [RILEY, C. V.] Grape-leaf gall. <Colman's Rural World, 20 September, 1876. S.-b. No. 14, p. 3.  
Answer to letter of A. A. Briggs; *Phylloxera vastatrix* does comparatively little damage on the leaves of grape-vines; Clinton and Taylor vines peculiarly subject to the attacks of the leaf-inhabiting form; Concord vines seldom attacked by it and not seriously injured by the root-inhabiting form; means against the leaf-inhabiting form.
1532. RILEY, C. V. New locust theory wanted. <Colman's Rural World, 27 September, 1876. S.-b. No. 14, p. 62.  
Answer to letter of W. T. D.; facts not theories wanted in regard to the flights of *Caloptenus spretus*.
1533. RILEY, C. V. Cecropia worm on elder. <Colman's Rural World, 27 September, 1876, 1 fig. S.-b. No. 14, p. 63.  
Answer to letter of A. S. Van Winkle; description of larva, cocoon, and imago of *Samia* [= *Attacus*] *cecropia*; figure of larva; habits and seasons; availability of the cocoon for silk.
1534. RILEY, C. V. The harlequin cabbage-bug. <Colman's Rural World, 4 October, 1876. S.-b. No. 14, p. 56.  
Answer to letter of R. J. Waters; habits, ravages, distribution, and means against *Strachia* [= *Murgantia*] *histrionica*; colors of early stages and of imagos.
1535. [RILEY, C. V.] Butterfly chrysalis. <N. Y. Tribune, 13 October, 1876. S.-b. No. 19, p. 224. Reprint: <N. Y. Tribune, 21 October, 1876. S.-b. No. 10, p. 223.  
Answer to inquiry of E. B. S.; occurrence of *Danaus archippus* in swarms in central United States in autumn of 1876; colors of larva and pupa; larva feeds on *Asclepias*.
1536. [RILEY, C. V.] Domesticated katydid. <N. Y. Tribune, 18 October, 1876. S.-b. No. 19, p. 214. Reprint: <N. Y. Tribune, 21 October, 1876. S.-b. No. 10, p. 219.  
Answer to letter of C. A. P.; longevity and food of *Microcentrum retinerve*.
1537. [RILEY, C. V.] Unjust accusation? <N. Y. Tribune, 21 October, 1876. S.-b. No. 10, p. 209; No. 19, p. 242.  
Answer to inquiry of a "Correspondent;" *Harpalus erraticus* accused of destroying shrubbery; predaceous habits of *Carabidæ*.
1538. RILEY, C. V. The Rocky Mountain locust. <Colman's Rural World, 1876, v. —, 30 October, 6 November, 13 November. S.-b. No. 10, pp. 185-188. See: <Kansas Farmer, November, 1876. S.-b. No. 10, pp. 225-235. <N. Y. Tribune, October, 1876. S.-b. No. 10, p. 215.  
Verification of predictions in regard to the limitation of the ravages of *Caloptenus spretus* in western Missouri in 1876; gathering eggs, ditching, rolling, and burning recommended as means against them; recommends the employment of soldiers, of hogs, and of poultry, late planting, and the destruction of the locusts in their native country; *Blissus leucopterus* more

## 1538. RILEY, C. V.—Continued.

injurious in Western Missouri in 1876 than *Caloptenus spretus*; prospect of freedom from injury by the former for the next two years; *Vilfa vaginiflora* introduced into the eastern prairies by the locusts; limit to the eastern range of the locusts; they are not led by kings or queens; occurrence of larvæ of *Deilephila lineata* after the disappearance of the locusts; locust flights in Illinois.

## 1539. [RILEY, C. V.] Oanker-worms at the West. &lt;N. Y. Tribune, 31 October, 1876. S.-b. No. 17, p. 59.

Occurrence of *Paleacrita vernata* in Michigan in 1872 and in Ohio in 1874, 1875, and 1876; brief account of *P. vernata* and *Anisopteryx pomeltaria*; their habits, ravages, and means against them.

1540. RILEY, C. V. [The venation of *Anisopteryx* and variation in imago.] <Ga. Ent., September [October], 1876, v. 8, pp. 178-179.

Variation in the venation of the wings of *Anisopteryx pomeltaria* and in the imago of so-called species.

## 1541. RILEY, C. V. A new enemy of the grasshopper. &lt;Lawrence [Kans.] Journal. Reprint: &lt;Industrialist [Manhattan, Kans.], 2 November, 1876, v. 2, No. 30, p. 2. S.-b. No. 10, pp. 209-210.

Letter of F. H. Snow with comments; eggs of *Caloptenus spretus* destroyed by larvæ of *Anthomyia calopteni* [= *angustifrons*]; characters of the larvæ; eggs destroyed by larvæ of some *Ichneumon*? [= *Systachus oreas*]; need of destroying eggs by artificial means.

## 1542. RILEY, C. V. Silk culture in Kansas. &lt;Nationalist, 10 November, 1876. S.-b. No. 14, p. 1.

Importance of silk culture; practicability of the culture and prospects of its increase in the United States; measures for its promotion in Kansas; successful raising of silkworms on osage orange [*Maclura aurantiaca*].

1543. RILEY, C. V. Bee killers: *Asilus* flies. <N. Y. Weekly Sun, 15 November, 1876. S.-b. No. 10, p. 201.

Habits of *Asilida*, especially of *Trupanea* [= *Promachus*] *apivora* and *Asilus missouriensis* [= *Proctacanthus milberti*]; description of *T.* [= *P.*] *apivora*; larva of *Asilus sericeus* feeds on roots of *Rheum raphanistrum*.

## 1544. RILEY, C. V. How to use Paris green for the cotton-worm. &lt;Colman's Rural World, 15 November, 1876. S.-b. No. 10, pp. 210-211. See: &lt;N. Y. Tribune, 15 December, 1876. S.-b. No. 14, p. 7.

Answer to letter of C. W. Niver; directions for the use of Paris green by the dry and wet method; description of sprinkling machines.

1545. [RILEY, C. V.] *Notodonta concinna*. <Colman's Rural World, 15 November, 1876. S.-b. No. 10, p. 219.

Answer to letter of J. Barritt; description of larva of *Notodonta* [= *Edemastis*] *concinna*; habits, food-plants, and means against the same.

## 1546. [RILEY, C. V.] The dog-day harvest-fly. &lt;Colman's Rural World, 15 November, 1876. S.-b. No. 10, p. 220.

Answer to inquiry of C. A. U.; description of *Cicada pruinosa* [= *tibicen*]; method of sonification; habits; notice of some manuals of entomology.



1547. [RILEY, C. V.] Snake-worms. <Colman's Rural World, 15 November, 1876. S.-b. No. p. 10, p. 220.

Answer to letter of J. Armstrong; description of larvæ of *Sciara* sp.; their habit of moving in congregations; their abode and enemies.

1548. RILEY, C. V. Locust eggs. <Colman's Rural World, 15 November, 1876. S.-b. No. 10, p. 223.

Answer to letter of C. T.; female *Acrididae* lay more than one litter of eggs; the occurrence of egg-like parasites in males has led to the supposition that the males bore eggs.

1549. RILEY, C. V. Locust flights east of the Mississippi. <Colman's Rural World, 22 November, 1876. S.-b. No. 10, pp. 211-212; 221-222; 223-225. Reprint: <Sci. Amer., 16 December, 1876 [v. 49], n. s., v. 35, p. 392, 2 figs. S.-b. No. 10, pp. 216, 217. <Trans. Kans. Acad. Sci., 1877, v. 5, pp. 62-64.

Limitation of plants and animals to certain geographical regions; regions in which alone *Caloptenus spretus* survives; species confounded with *C. spretus*; occurrence of swarms of *Acridium americanum* in Ohio; description, geographical distribution, and ravages of the same; swarms of *Caloptenus differentialis*, *C. atlantis*, and *C. femur-rubrum* in Illinois; ravages of the same. The reprint in the Sci. Amer. contains figures of *Caloptenus spretus* and *Acridium americanum*.

1550. RILEY, C. V. Locusts again. <N. Y. Tribune, 22 November, 1876. S.-b. No. 10, p. 222.

Effects of winter on the vitality of the eggs of *Acrididae*.

1551. RILEY, C. V. The army-worm; its natural history complete. <Sci. Amer., 9 December, 1876 [v. 49], n. s., v. 35, p. 372, 4 figs. S.-b. No. 10, pp. 217-219. Reprint, with slight changes: <Proc. Amer. Assoc. Adv. Sci. for 1876, 1877, v. 25, pp. 279-283, 2 figs.

Geographical distribution of *Leucania unipuncta*; figures of all stages and of ovipositor of female; place and manner of oviposition; description of eggs and young larvæ; number of annual broods; summary of the natural history of this species.

1552. RILEY, C. V. The apple-bark louse. <Ca. Farmer, 15 December, 1876. S.-b. No. 14, p. 50.

Seasons, habits, and ravages of *Mytilaspis pomicorticis* [= *pomorum*]; description of young larvæ; of males and females and formation of scales.

1553. RILEY, C. V. The apple maggot; a formidable enemy. <N. Y. Semi-weekly Tribune, 15 December, 1876. S.-b. No. 14, pp. 7-8.

Answer to letter of P. M. Angur; description of larva and imago of *Trypeta pomonella*; ravages, food-plants, habits, and means against the same; literature of the subject.

1554. RILEY, C. V. Entomological notes; confounding friend with foe. <Colman's Rural World, 20 December, 1876. S.-b. No. 14, p. 4.

Description of scales and eggs of *Diaspis harrisii* [= *Chionaspis furfurus*] and of colors of larva, pupa, and imago of *Chilocorus bivulnerus*; ravages of the *Diaspis*; habits and usefulness of the *Chilocorus*.

1555. RILEY, C. V. Locust injury next spring. The territory in Missouri that will probably suffer therefrom. <Colman's Rural World, 20 December, 1876. S.-b. No. 14, pp. 5-6. Reprint: <Industrialist [Manhattan, Kans.], 17 February, 1877, v. 2, No. 44, p. 4. S.-b. No. 14, p. 49.  
Prediction of ravages of *Caloptenus spretus* to occur in spring of 1877 in Missouri.
1556. [RILEY, C. V.] Amputating insects. <N. Y. Semi-weekly Tribune, 29 December, 1876, 2 figs. S.-b. No. 14, pp. 8-9.  
Description of the work of *Elaphidion putator* [= *villosus*] and *Oncideres cingulata*; habits of both; figures of larva, pupa, and imago of the latter; similarity in habits of *Oncideres amputator* and *E. putator* to those of *O. cingulata*.
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Note of a trip in the southern United States in 1878; commission to investigate insects injurious to the cotton-plant; food-plants and habits of the larva and imago of *Aletia argillacea* [= *xylina*]; use of poisonous baits and of Paris green; *Anomis exacta* injurious in certain regions.
1658. RILEY, C. V. Some further facts regarding that "fatherless race." <Sci. Amer. Suppl., 30 November, 1878. S.-b. No. 19, pp. 238-239.  
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1659. [RILEY, C. V.] "The carpet bug." <N. Y. Tribune, 1 December, 1878. S.-b. No. 19, p. 236.  
Ravages of and means against *Anthrenus scrophularia*; figures larva, pupa and imago.
1660. [RILEY, C. V.] A bug that eats bees. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, p. 237. Reprint: <Prairie Farmer, 4 January, 1879, v. 50, p. 3. S.-b. No. 23, p. 110.  
Description and habits of *Phymata erosa*.
1661. [RILEY, C. V.] Tomato worm. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, p. 237.  
Excessive abundance of larva of *Sphinx quinquemaculata* [= *Protoparce colous*] near Port Hope, Ontario, in 1878.
1662. [RILEY, C. V.] Worm snake. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, p. 237.  
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1663. [RILEY, C. V.] Carpet pests. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, p. 237.  
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1664. RILEY, C. V. Corn worm. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, pp. 235; 237.  
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1665. [RILEY, C. V.] Hessian-fly. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, pp. 235; 237.  
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1666. [RILEY, C. V.] Apple-worm. <N. Y. Tribune, 4 December, 1878. S.-b. No. 19, pp. 235; 237.  
Baldwin apples more exempt than other varieties from the attacks of the second brood of *Carpocapsa pomonella*.
1667. RILEY, C. V. Anent the English sparrow. <Evening Star [Washington, D. C.], 28 December, 1878, v. 52, No. 8030, p. 1. S.-b. No. 19, pp. 214-215; No. 23, p. 151.  
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Limits of breeding-grounds of and region invaded by *Caloptenus spretus*; causes, periods, and directions of flights of the same; causes of the limitation of the flights; ravages; generalizations regarding locust invasions; work of the U. S. Entomological Commission.

1670. RILEY, C. V. A complete life-history of the army-worm, *Leucania unipuncta*, and its parasites. <25th Ann. Rept. Secr. Mass. Board Agric. for 1877, 1878, pp. 243-253, figs.

Early history, synonymy, distribution, seasons, enemies, and parasites of *Leucania unipuncta*; habits of larvæ and of female imagoes; descriptions of all stages; figures of all stages except the egg; figures of two unnamed parasitic Ichneumonids. Parasitic habits of *Exorista* [= *Nemoræa*] *leucaniæ*, *E. flavicauda*, *Microgaster* [= *Apanteles*] *militaris*, *Pezomachus minimus*, and *Ophion purgatus*; descriptions of *Microgaster* [= *A.*] *militaris*, *Mesochorus vitreus*, and *Ophion purgatum*. *Ichneumon leucaniæ* also a parasite.

1671. RILEY, C. V. Phylloxera. <Johnson's New Universal Cyclopædia, 1878, v. 3, pp. 1241-1243, 8 figs. S.-b. No. 10, pp. 192-194.

Definition of the genus *Phylloxera*; list of the sixteen (16) described United States species; descriptions of their galls; distribution, history, description, and figures of various stages and ravages of and means against *Phylloxera vastatrix*.

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List of principal enemies of potato-plant; spread, natural history, food-plants, enemies of, and means against *Doryphora decemlineata*; figures of the same in its different stages, and of *Lydella* [= *Exorista*] *doryphoræ*, *Calosoma calidum*, *Hippodamia convergens*, *Mysia* [= *Anatis*] *15-punctata*, *Arma* [= *Podisus*] *spinosus*, *Harpactor* [= *Milyas*] *cinctus*, *Perillus circumcinctus*, and *Doryphora juncta*.

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Definition of "weevil;" mention of numerous species, with statement of their food-plants and manner of obtaining food; habits and means against *Sitophilus* [= *Calandra*] *granaria* and *S.* [= *C.*] *oryzæ*.

1674. RILEY, C. V. The locust swarms that devastate the trans-Mississippi country; their source, movements, and eastern limit. <Western Farmer's Almanac for 1879, 1878, pp. 48-50. S.-b. No. 19, pp. 247-248.  
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1675. [RILEY, C. V.] Prof. Riley in favor of the birds. <Evening Star [Washington, D. C.], 9 January, 1879, v. 53, No. 8039, p. 3. S.-b. No. 19, pp. 223-224; No. 23, p. 94.  
From St. Louis [Mo.] Globe-Democrat. List of some birds which are beneficial to horticulture and some which are noxious.
1676. RILEY, C. V. Letter from Prof. C. V. Riley. <Colman's Rural World, 15 January, 1879. S.-b. No. 23, pp. 107-108.  
Letter to N. J. Colman transmitting report as former treasurer of the Missouri State Horticultural Society; transmission of documents for distribution; proposal for a revised and condensed edition of author's reports as State entomologist of Missouri.
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Freedom of apples from *Carpocapsa pomonella* in 1878 in Michigan due to the smallness of the apple crop in 1877 and to the efforts made by the orchardists to exterminate the insects.
1678. RILEY, C. V. Notes on the *Aphididae* of the United States, with descriptions of species occurring west of the Mississippi. <Bull. U. S. Geol. and Geog. Surv. Terr., 28 February, 1879, v. 5, pp. 1-32, pl. 1-2, with 2 pp. expl. of pl. Separate: <Washington, 22 January, 1879, 32 pp., 2 pl., with 2 pp. expl. of pl. Abstract: <Sci. News, 15 April, 1879, v. 1, pp. 184-186.  
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Part 2, pp. 18-32, by J. Monell, entitled "Notes on *Aphidinae*, with descriptions of new species." Describes nine (9) new species of *Siphonophora*, five (5) of *Aphis*, two (2) of *Rhopalosiphum*, nine (9) of *Callipterus*, three (3) of *Chaitophorus*; description of other species of these genera and of *Drepanosiphum* and the genera above named; synoptic tables of some of the species.
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*Aphididae* reputed injurious to potato plants, probably *Aphis solani*.
1680. RILEY, C. V. Missouri entomological reports. <Colman's Rural World, 19 February, 1879. S.-b. No. 23, p. 102.  
Proposal for republication of the reports of the State entomologist of Missouri; reasons for the non-publication of a tenth report; sketch of what that report would have contained.

1681. RILEY, C. V. Entomological notes. The chinch-bug. <Farmer's Review. February, 1879, 2 figs. S.-b. No. 23, pp. 111-112.  
 Figures of all stages, ravages, natural history, and means against *Blissus leucopterus*; its method of hibernation, and the effect of weather upon it.
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 Figures larva, pupa, and imago of *Calandra oryzae* and imago of *C. granaria*; habits, ravages, and means against the same; description of egg and method of oviposition of *C. oryzae*; use of carbon bisulphide against these insects; poisonous effects of eating the comminuted beetles.
1684. RILEY, C. V. [Letter to W. G. Le Duc.] <Boston Daily Herald, 4 April, 1879. <Psyche Advertiser, 11 April, 1879, v. 2, p. 9. <Ent. Nach., 1 July, 1879, jahrg. 5, p. 177.  
 The reason for which the author resigned as entomologist of the U. S. Department of Agriculture was not ill-health.
1685. RILEY, C. V. Preventing rot in plums. <N. Y. Tribune, 9 April, 1879. S.-b. No. 23, p. 110; 129.  
 Trapping and jarring recommended as a means against *Conotrachelus nenuphar*.
1686. [RILEY, C. V.] A new insect pest. <Colorado Farmer, 10 April, 1879, v. 12, No. 15, p. 6. S.-b. No. 23, p. 108.  
 Injury to orchards and ornamental trees in California by *Dorthesia* [*characias*?], introduced from Australia; ravages of *D. characias* in southern Africa; prospective ravages in California; means against it.
1687. RILEY, C. V. The nervous system and salivary glands of Phylloxera. <Psyche, 11 April, 1879, v. 2, pp. 225-226.  
 Correctness of E. L. Mark's conclusion that the author had mistaken nerve cords for tracheæ; dissent from M. Cornu's view that the root swellings caused by *Phylloxera* are due to mechanical action of the puncture and the subsequent absorption of liquids; swelling considered to be caused by the introduction of a salivary secretion.
1688. RILEY, C. V. Mr. Henderson's experiments. <Gardener's Mo. and Hort., April, 1879, v. 21, pp. 120-121. S.-b. No. 23, p. 107.  
 Review of P. Henderson's "Carnivorous plants;" believes that *Dionaea* and *Drosera* are nourished by the insects digested by their leaves.
1689. RILEY, C. V. The migrations and hibernation of *Aletia argillacea*. <Washington [D. C.] World, 10 May, 1879. <Science News, 1 June, 1879, v. 1, pp. 230-232. S.-b. No. 23, pp. 119-120. <Sci. Amer., 14 June, 1879 [v. 54], n. s., v. 40, p. 375. <Galveston [Tex.] Daily News, 24 October, 1879, v. 38, p. 2.



## 1689. RILEY, C. V.—Continued.

S.-b. No. 23, pp. 166–167, No. 42, pp. 38–39. Abstract: <Amer. Nat., November [25 October], 1879, v. 13, p. 726. <Farmer's Review, September, 1879. S.-b. No. 23, p. 108.

Ravages of insects, particularly of *Aletia argillacea* [= *zyliana*] in the United States; hibernation theories; author's belief in the probable hibernation of the moth in the southern parts of the cotton belt; species mistaken for *Aletia*; description and food-plants of *Aspila virescens*.

## 1690. RILEY, C. V. Insects affecting clover. &lt;N. Y. Tribune, 14 May, 1879. S.-b. No. 23, p. 90; 97; 129.

Habits, ravages of and means against *Hylesinus trifolii* and *Cecidomyia leguminicola*; prior observations upon the same; characters distinguishing *C. leguminicola* from *C.* [= *Diplosis*] *tritici* and *C. destructor*.

1691. RILEY, C. V. [*Ecanthus niveus*.] <N. Y. Tribune, 14 May, 1879. S.-b. No. 23, p. 95; 98.

Occurrence of eggs of *Ecanthus niveus* in twigs of apple, raspberry, grape, and other plants; slight injuries to be expected from the same; means against them.

## 1692. [RILEY, C. V.] Insect powders and their use. &lt;N. Y. Tribune, 14 May, 1879. S.-b. No. 23, p. 95; 96; 130–131.

Abstract of W. Saunders' "Insect powder," with additions; differences between Persian and Dalmatian insect powder; methods of using them against insects.

## 1693. [RILEY, C. V.] The grasshopper prospect. &lt;N. Y. Tribune, 14 May, 1879. S.-b. No. 23, p. 98.

Prospect of injuries by *Caloptenus spretus* in 1879; a new species injurious in the Sierra Valley of California.

1694. RILEY, C. V. The westward progress of the imported cabbage-worm. <Amer. Nat., June [20 May], 1879, v. 13, p. 393. See: <Colorado Farmer, 10 April, 1879. S.-b. No. 23, p. 108. <Farmer's Review, April, 1879. S.-b. No. 22, p. 64. <Colman's Rural World, 1879. S.-b. No. 23, p. 108. <Ann. Rept. [U. S.] Commissioner Agric. for 1878, 22 November, 1879, p. 239. Spread of *Pieris rapæ* into Illinois and Missouri; means against the same.

## 1695. [RILEY, C. V.] Lures for moths. &lt;N. Y. Tribune, 28 May, 1879. S.-b. No. 23, p. 95.

Trapping *Carpocapsa pomonella* in shallow dishes of sweetened liquid more harmful than beneficial, as many useful insects are destroyed; the method serviceable against *Heliothis armigera*.

## 1696. [RILEY, C. V.] The currant-worm. &lt;N. Y. Tribune, 11 June, 1879. S.-b. No. 23, p. 106.

Description, habits, distribution, and spread of and means against *Nematus ventricosus* [= *ribesii*]; methods of using hellebore.

## 1697. [RILEY, C. V.] Sweet-potato beetle. &lt;N. Y. Tribune, 11 June, 1879. S.-b. No. 23, pp. 106–107; 131.

Description of all stages, habits, food plants, and means against *Coptocycla* [= *Cassida*] *nigripes*.

1698. RILEY, C. V. [The seventeen year Cicada.] <N. Y. Tribune, 1879. Reprint: <Colman's Rural World, 25 June, 1879. S.-b. No. 23, p. 152.  
Boundaries of the areas in which *Cicada* [= *Tibicen*] *septendecim* is expected to occur in 1879; request for information of its appearance.
1699. RILEY, C. V. The imported carpet-beetle, *Anthrenus scrophulariae*, L. <Farmer's Review, 1879, fig. S.-b. No. 23, pp. 96-98. Extract: <Amer. Ent., March, 1880 [v. 3], n. s., v. 1, p. 54.  
Letter of J. H. Parsons, with answer; description of larva and imago of *Anthrenus scrophulariae*; its history, habits, ravages, and means against them; figures larva, pupa, and imago.
1700. [RILEY, C. V.] The cheese-skipper. <N. Y. Tribune, 2 July, 1879. S.-b. No. 23, p. 93. Notice: <Farmer's Review, 7 September, 1879. S.-b. No. 23, p. 103.  
Description of larva, pupa, and imago, habits and means against *Platypoda casei*.
1701. RILEY, C. V. The thick-thighed walking-stick. <Sci. Amer., 5 July, 1879 [v. 55], n. s., v. 41, pp. 7-8, fig. S.-b. No. 23, p. 121.  
Reprint, with slight changes: <Ann. Rept. [U. S.] Commissioner Agric. for 1878, 22 November, 1879, pp. 241-245, pl. 3.  
Treats of *Diapheromera femorata*. See No. 1721 for synopsis of contents.
1702. RILEY, C. V. The cotton-worm. <Mobile Register, 9 July, 1879. S.-b. No. 68, p. 204. See: <Colorado Citizen, 17 July, 1879. S.-b. No. 23, p. 91. <Galveston News, 19 July, 1879. S.-b. No. 23, p. 93.  
Remarks at the Cotton Exchange about prospective injuries from *Aletia argillacea* [= *xyliana*]; sudden appearance and means against the same; more injurious in wet than dry weather.
1703. RILEY, C. V. Other insects affecting cheese. <N. Y. Tribune, 9 July, 1879. S.-b. No. 23, p. 92. Reprint: <Amer. Dairyman. <Western Rural, 9 August, 1879, v. 17, No. 32, p. 250. S.-b. No. 23, p. 92.  
Habits and transformations of *Tyroglyphus siro*, *Corynetes* [= *Necrobia*] *rufipes*, and *Dermestes lardarius*; tenacity of life of the *Tyroglyphus* and assumption of *Hypopus* form by the same; anecdote of Latreille; injury done in cheese by *Musca corvina*.
1704. RILEY, C. V. Pupation of the *Nymphalidae*. Abstract: <Psyche, 11 July, 1879, v. 2, pp. 249-251.  
Notice of prevalent explanations of the manner in which suspended pupa of Lepidoptera support themselves while shedding the larval skin; explanation of the process in *Vanessa antiopa* and *Paphia glycerium*.
1705. RILEY, C. V. Fire-flies. <Sci. Amer., 26 July, 1879 [v. 55], n. s., v. 41, p. 49. S.-b. No. 23, p. 104.  
Definition of "Fire-flies;" description of larva, pupa, and imago of *Photinus pyralis*; *Photuris pennsylvanicus*, the commonest species in the more northern states; absence or imperfect development of wings in certain female *Lampyridae*.

1706. RILEY, C. V. Grape-scale insect, new species. <Pacific Rural Press, 16 August, 1879. S.-b. No. 32, p. 66.  
Answer to inquiry of editor of Press; a new coccid, allied to *Pulvinaria vitis*.
1707. RILEY, C. V. Dragon-flies. <Sci. Amer., 23 August, 1879 [v. 55], n. s., v. 41, p. 113. S.-b. No. 23, p. 100.  
Description and natural history of *Libellulidae*.
1708. RILEY, C. V. Failure of tea roses. Habits of Fuller's rose beetle, *Aramigus fulleri* Horn. <Sci. Amer., 30 August, 1879 [v. 55], n. s., v. 41, p. 129, fig. S.-b. No. 23, pp. 114-116. Reprint: <Gardener's Mo. and Hort., October, 1879, v. 21, pp. 310-311, fig. S.-b. No. 23, pp. 126-127. Reprint, with additions: <Ann. Rept. [U. S.] Commissioner Agric. for 1878, 22 November, 1879, pp. 255-257, pl. 17, f. 2.  
See No. 1721 for synopsis of contents.
1709. RILEY, C. V. The "Devil's darning needle." <Sci. Amer., 6 September, 1879 [v. 55], n. s., v. 41, p. 148. S.-b. No. 23, p. 104. Review: <Sci. Amer., 27 September, 1879 [v. 55], n. s., v. 41, p. 194. S.-b. No. 23, p. 103½.  
*Diapheromera femorata* winters in the egg-state; W. J. McGee confounds the above with a species of *Ranatra*; the term "Devil's darning needle" mostly associated in the popular mind with the dragon-flies (*Libellulidae*).
1710. [RILEY, C. V.] The red-spider on roses. <Sci. Amer., 13 September, 1879 [v. 55], n. s., v. 41, p. 161. S.-b. No. 23, pp. 116-117.  
Nature, ravages, and means against *Tetranychus telarius*; habits and transformations of *Acarina*.
1711. RILEY, C. V. Philosophy of the pupation of butterflies. <Sci. Amer. Suppl. No. 193, 13 September, 1879, p. 3069, 3 figs. S.-b. No. 23, p. 125. Reprint: <Science News, 15 September, 1879, v. 1, pp. 346-350. Reprint with changes: <Nature, 16 October, 1879, v. 20, pp. 594-595. <Kosmos, January, 1880, bd. 6, pp. 313-318. <Proc. Amer. Assoc. Adv. Sci. for 1879, 1880, v. 28, pp. 455-463, figs. <Separate: Salem, Mass., July, 1880, 9 pp., 6 figs. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, pp. 162-167, figs. 65-70. Abstract: <The Field Nat. and Sci. Student, January, 1883, pp. 179-180. S.-b. No. 42, p. 1. <Bull. Philos. Soc. Wash., 1879, v. 3, pp. 41-43.  
Illustrates the prevalent explanation of the manner in which suspended chrysalids become attached to their supports; describes and illustrates the more correct process; structure of the terminal joint of the chrysalis especially in *Vanessa antiopa*, *Terias* sp., *Danais archippus*, and *Paphia glycerium*.
1712. RILEY, C. V. Parasites of the cotton-worm. <Ca. Ent., September, 1879, v. 11, pp. 161-162.  
List of parasites of *Aletia argillacea* [= *xylina*]; descriptions of *Trichogramma pretiosa* n. sp. [p. 161], *Cirrospilus* [= *Tetrastichus*] *esurus* n. sp. [p. 162], and *Tachina aletiae* n. sp. [p. 162].

1713. RILEY, C. V. [Insect injurious to junipers.] <Ca. Ent., September, 1879, v. 11, p. 177.  
Junipers on Long Island injured by *Dapsilia rutilana*.
1714. RILEY, C. V. The imported cabbage-worm in the South. <Farmer's Review, September, 1879. S.-b. No. 23, p. 106.  
Spread of *Pieris rapæ* westward and southward; its present distribution; southern limit of distribution of *Deryphora 10-lineata*.
1715. RILEY, C. V. The shedding of the tracheæ and double cocoons. <Amer. Nat., October, 1879, v. 13, p. 652.  
Review of two notes by E. Potts.
1716. RILEY, C. V. Leaf-galls on the grape-vine. <N. Y. Tribune, 1 October, 1879. S.-b. No. 23, pp. 117; 173. See: <Kansas Farmer, 26 November, 1879. S.-b. No. 26, p. 9. <West. Rural, 10 December, 1879.  
Habits, ravages, reproduction, and distribution of *Phylloxera vastatrix*.
1717. RILEY, C. V. The Croton bug as a library pest. <Library Journal, September-October, 1879, v. 4, p. 376.  
Letter to Weston Flint; ravages of and means against *Blatta* [= *Ectobia*] *germanica*.
1718. RILEY, C. V. The Ailanthus silk-worm, *Attacus* (*Samia*) *cynthia*. <Science News, 15 October, 1879, v. 1, pp. 377-383. Extract: <Amer. Ent., March, 1880 [v. 3], n. s., v. 1, pp. 56-58, fig. 16. <Farmer's Review, 8 January, 1880, v. 4. S.-b. No. 23, pp. 167-168.  
Description of eggs, larvæ, and imagoes of *Samia* [= *Attacus*] *cynthia*; history, food-plants, acclimation, and artificial rearing of the same, and of *Samia* [= *Attacus*] *ricini*; differences between the eggs, larvæ, and cocoons of the two species; availability of these and other species for silk-culture; superiority of *Sericaria mori* for this purpose; occurrence of parthenogenesis and of retardation of development in *Bombycidae*.
1719. RILEY, C. V. The cotton-worm. Letter from Prof. C. V. Riley on some recent cotton-worm articles in the News. <Galveston [Tex.] Daily News, 24 October, 1879, v. 38, No. 185, p. 2. S.-b. No. 23, pp. 164-165. Reply: <*Ibid.*, 31 October, 1879, No. 191, p. 4.  
Critical review of W. J. Jones's "The cotton caterpillar," and of Investigator's "The cotton-worm;" denies that *Aletia argillacea* [= *zylina*] hibernates in the pupa state; author not interested in entomological discoveries for mercenary ends.
1720. RILEY, C. V. [Spread of *Pieris rapæ* into Alabama.] <Ca. Ent., October, 1879, v. 11, p. 196.  
*Pieris rapæ* now quite common in Alabama; it has reached Selma but not Mobile.
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\* Translation: <Acker- und Gartenbau-Zeitung, 1 June, 1860, v. 11, p. 87, fig. S.-b. No. 23, p. —.

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\* Translation: <Acker- und Gartenbau-Zeitung, 1 August, 1880, v. 11, p. 119, 2 figs. S.-b. No. 23, p. —. Extract: <Prairie Farmer, 22 November, 1879, v. 50, p. 370. S.-b. No. 23, pp. 168-169. <Amer. Rural Farmer, 18 December, 1879. S.-b. No. 45, pp. 23-24.

† Translation: <Acker- und Gartenbau-Zeitung, 1 September, 1880, v. 11, p. 135, fig. S.-b. No. 23, p. 182.

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1746. [RILEY, C. V.] Beetles supposed to be feeding on wheat. <Amer. Ent., February, 1880 [v. 3], n. s., v. 1, p. 50.  
Answer to letter from P. H. M.; larva of *Cryptorhopalum* sp. supposed to have injured grains of wheat, was probably feeding on the remains of true grain insects; food-habits of larvæ of *Dermeestidæ*.
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Answer to letter from H. G. Wolcott; habits, food-plants, and means against *Amphicerus bicaudatus*; figure of male and female imago and of bored apple-twigs; habits and food-plants of *Sinoxylon basillare* and of *Bostrichus*.
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Method of obtaining eggs of *Sericoaria mori* and information on silk culture.
1754. [RILEY, C. V.] [Hickory *Scolytus*.] <Amer. Ent., March, 1880 [v. 3], n. s., v. 1, p. 58.  
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## 1769. RILEY, C. V.—Continued.

tory and refutation of the annual immigration theory; division of the cotton belt into regions wherein, respectively, *A. argillacea* [= *xyliana*] is permanent and temporary; food-habits and enemies of the same.

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Answer to letters of P. S., T. A. C., and J. W.; seasons, ravages of and means against *Agilus ruficollis*.

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Impracticability of W. J. W.'s suggestion as indicated in title.

## 1773. [RILEY, C. V.] Not the cotton-moth. &lt;Amer. Ent., April, 1880 [v. 3], n. s., v. 1, p. 107.

Answer to inquiry of D. B. Woodbury; food-plants of *Tolyte velleda*.

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Mentions several insects received from J. F. Bailey, of Marion, Ala.; larva of *Papilio philenor* feeds on *Aristolochia*; *Bombus virginicus* ♀ robs hives of *Apis mellifica*; *Mytilaspis pomioortici* [= *pomorum*] not before received from so far south; means against the same.

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Answer to letter of W. J. Jones; pupæ of *Agrotis inermis* [= *saucia*] and *Prodenia lineatella* from cotton field.

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Answer to inquiry of W. W. F.; several "weevils" infest clover-seeds; *Hyletinus trifolii* infests the roots and lower part of the stem.

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Notice of the experiments of W. H. Edwards; effects of hibernation in the chrysalis and imago states.

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Notice of J. J. Weir on the issuance of *Orgyia* sp. from the larva without passing through the pupal stage.

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Review of paper by G. Macloskie.
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Report of meeting of the Entomological Society of London; length of proboscis of and presence of scent organ in *Sphingidæ*; perception of colors in *Rhopalocera*; secondary sexual character in *Callidryas* and other genera; according to R. Meldola the proboscis of *Macrosila cluentius* is 23.5<sup>cm</sup> (9<sup>4</sup> inches) long.
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Answer to letter of S. A. Conrad; description of all stages of *Aleurodes* sp. from leaves of *Oxalis* sp.
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 Description and figures of *Torrubia ravenelii* and of its fructification; forms in which it occurs on larvæ of *Lacknosterna quercina* [= *fusca*]; list of some articles upon it; its synonymy and distribution; list of related species and their distribution; occurrence of related species on other insects.
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 History of observations on *Prodoxus decipiens*; habits, parasite, and food-plants of the same; evolution of *Prodoxus* and *Pronuba*; criticism of errors resulting from mistaking *Prodoxus decipiens* for *Pronuba yuccasella*; failure of *Yucca angustifolia* to become fertilized in the absence of *Pronuba yuccasella*; *Hyponomeuta quinquepunctella* Chambers is the same as *Prodoxus decipiens*.
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 Criticism of a discussion before the London Entomological Society; the winged imagos of *Lampyridæ* can intermit their light; the larvæ and wingless imagos can suppress their light.
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Description of larva and imago of *Exotheocus prodoxi* n. sp.; habits of larva.
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Notice of paper by G. C. Goody.

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Examination of roots of unhealthy vines by R. McLachlan and R. Trimen show that the disease of the vines is not caused by *Phylloxera vastatrix*.
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Notice of the appropriation by Congress of \$25,000 for completing the work of the U. S. Entomological Commission.
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Comments on letter of V. T. Chambers.
1845. [RILEY, C. V.] Interesting cotton-worm notes from Vera Cruz, Mexico. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 179. Reprint with slight omission: <Suppl. to Amer. Ent., July, 1880, p. 3.  
Letters from S. T. Trowbridge and R. de Zayas Enriquez, with notes on the irregular occurrence of *Aletia argillacea* [= *xyliana*] in Vera Cruz.
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Answer to letter of Mary Treat; figures of cells and of imago of *Eumenes fraternus*, which stores its cells with larvæ of *Palaecrita vernata*; figure and descriptions of egg-nests of *Epeira* sp.
1848. [RILEY, C. V.] Worm in joints of wheat. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, pp. 180-181, fig. 85. Reprint: <Suppl. to Amer. Ent., July, 1880, p. 4.  
Answer to letter of J. K. P. Wallace; ravages of an unknown, apparently hymenopterous, larva in wheat stalks; figure of larva and pupa of *Meromyza americana* and of stalks injured by the same.
1849. [RILEY, C. V.] Linden and ash destroyers. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 181. Reprint: <Suppl. to Amer. Ent., July, 1880, p. 4.

## 1849. RILEY, C. V.—Continued.

Answer to letter of Shelby Reed; season of appearance of *Odontota rubra* on *Tilia*; larvæ of *Hyphantria texior* [= *cunea*] feeding on the same; *Saperda calcarata* boring in poplar, and an unknown larva (*Neoclytus caprea*?) boring in black-ash.

## 1850. [RILEY, C. V.] Larva boring along the axis of apple-twigs. &lt;Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 181.

Answer to letter of T. V. Munson; twigs of apple-trees bored by larvæ of *Oberea* sp.?

## 1851. [RILEY, C. V.] Aquatic larvæ. &lt;Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 181.

Answer to letter of S. A. Forbes; larvæ of *Anax junius* and *Palingenia* [= *Hexagenia*] *bilineata* named; the latter common in the stomach of fishes.

## 1852. [RILEY, C. V.] First appearance of cotton-worm in prairie belt. Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 181. Reprint: &lt;Suppl. to Amer. Ent., July, 1880, pp. 3-4.

Answer to letter of J. F. Bailey; larvæ of *Aletia argillacea* [= *xylina*] appear first on lands where the cotton is luxuriant.

1853. [RILEY, C. V.] *Gyrinus* larva; terrestrial insects in stomach of shad. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 182.

Answer to letter of S. A. Forbes; character of larva of *Gyrinus*; a mass of terrestrial insects including *Typhlocyba vitis*? a muscid, a Eurytomid, *Jassus* sp., *Triphleps insidiosus*, and other species from the stomach of Ohio shad.

1854. RILEY, C. V. Further remarks on the differences between *Pronuba* and *Prodoxus*. <Amer. Ent., July, 1880 [v. 3], n. s., v. 1, p. 182.

Differences between *Pronuba yuccasella* and *Prodoxus decipiens* in the form, sculpture, and color of the terminal joint, and of the ovipositor.

1855. [RILEY, C. V.] The grape-vine flea-beetle, *Graptodera chalybea* Illig. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, pp. 183-184, fig. 86.

Habits, seasons, ravages of, and means against *Graptodera* [= *Haltica*] *chalybea*; figures, injured leaf, and larvæ, cocoon, and imago of the same.

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Progress of knowledge upon the number of annual generations of *Leucania atripuncta*; stages of growth at which it hibernates; the destructive generation probably not the first of the season; explanation of the partial efficacy of the burning of fields in winter as a means against this insect; connection of wet and dry seasons with its increase; its natural habits; errors of A. Fitch.

## 1857. [RILEY, C. V.] Sprinklers and atomizers. &lt;Amer. Ent., 1880 [v. 3], n. s., v. 1: August, pp. 185-189, figs. 87-98; September, pp. 211-214, figs. 111-117.

Extracts from pp. 56-57 and reprint of pp. 85-94 of Bull. No. 3, U. S. Entomological Commission. See No. 1736 for synopsis of contents.

1858. RILEY, C. V. The use of pyrethrum. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, pp. 193-195.  
Record of experiments by W. A. Henry upon the effect of Pyrethrum powder on *Halticidæ*, *Meloidæ*, *Pieris rapæ*, *Coreus* [= *Anasa*] *tristis*, and *Blattidæ*; and of the fumes of burning pyrethrum on various insects.
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Ravages of *Doryphora 10-lineata* in Coos County, N. H., in 1879.
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Final transformations of individuals from a single batch of eggs of *Epicauta vittata* occurring at the first, second, and third year after hatching.
1861. [RILEY, C. V.] Ox-eye daisy as an insecticide. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, p. 196.  
Experiments by W. S. Barnard upon the effect of alcoholic extracts of the flowers and stems of the ox-eye daisy on insects; "no evidence that they will prove of any practical value."
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Directions for sowing the seeds and cultivating the plants of pyrethrum.
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Notice of the appointment of J. A. Lintner as State Entomologist of New York.
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Meeting of the U. S. Entomological Commission; plan of work to be done in 1880-1881; partial list of persons engaged in the work.
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Tabulation of the number of entomologists of the several countries of Europe.
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Commendation of the above work and of the supplementary list of *Elatridæ* by E. Candèze; need of co-operation for the completion of the whole catalogue.
1867. [RILEY, C. V.] Carnivorous propensity of plant-feeders. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, p. 200.  
Larvæ of *Plusia brassicæ* devour those of *Pieris rapæ* and *Pionæa rimosalis* in default of more natural food.
1868. [RILEY, C. V.] Beetles injuring cabbages and fuchsias. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, p. 200, fig. 106.  
Answer to letter of G. T.; ravages, distribution, and figures of *Epicærus imbricatus*; description of eggs, ravages, food-plants, and means against *Graptodera* [= *Haltica*] *ovrinata*.
1869. [RILEY, C. V.] Spider and nest. <Amer. Ent., August, 1880, [v. 3], n. s., v. 1, p. 200.  
Answer to letter of Mrs. J. B. Harrison; distribution and distinctive characters of *Acrosoma stellatum*.



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Answer to letter of A. R. Frost; food-plants and ravages of larva and figure of larva and imago of *Gortyna nitela*.
1871. [RILEY, C. V.] Larvæ from stomach of blue-bird. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, p. 201.  
Answer to letter of S. A. Forbes; larva of *Meracantha contracta* and of *Callimorpha* sp. from stomach of blue-bird; habits and characters of the same.
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Answer to letter of S. F. Clarke; occurrence in Maryland and Missouri of a luminous larva (*Melanactes* sp. ?) [= *Phengodes* sp.]; figures of the larva, of its head and leg enlarged and of its probable parent; occurrence in the more northern States of a similar larva, probably that of *Asaphes memnonius*.
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Answer to letter of J. Monaghan; ravages of larva of *Meromyza americana*.
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Answer to letter of L. T. Derrousse; *Leucania unipuncta* frequently leaves clover-plants untouched while eating the grasses growing with the clover, but under some circumstances destroys young clover-plants.
1878. [RILEY, C. V.] Ichneumon from stomach of bluebird. <Amer. Ent., August, 1880 [v. 3], n. s., v. 1, p. 203.  
Answer to letter of S. A. Forbes; *Lampronota* sp. eaten in quantity by blue-birds.
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Answer to letter of C. F. Durksen; need of silk-filatures in the United States; present means of selling cocoons.
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Answer to letter of J. G. Danterive; reference to the most reliable poison and the best machines and methods for applying poison to kill *Aletia argillacea* [= *xylina*].
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Abstract of paper by Jousset de Belleme; direction of flight not determined by the motion of the wings, but principally by the displacement of the center of gravity, resulting from the changes of position of other parts of the body.
1892. [RILEY, C. V.] Entomological work at the Department of Agriculture. <Amer. Ent., September, 1880 [v. 3], n. s., v. 1, p. 222.  
Notice of the continuation of the appropriations by Congress for field-work and experiments in the entomological division of the U. S. Department of Agriculture.
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Titles of twenty-eight [28] papers read at the Boston meeting.
1894. [RILEY, C. V.] Entomologists at Boston. <Amer. Ent., September, 1880 [v. 3], n. s., v. 1, p. 223.  
Notice of the 29th meeting of the A. A. A. S. at Boston, August-September, 1880.
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Letter from J. S. Hyde, with remarks; extracts from papers by E. W. Hilgard; winged fertile females of *Phylloxera vastatrix* found in California; local evidence of the spread of this insect; means of eradicating the same.

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Answer to letter of J. Greenwood, jr.; description of larva and imago of *Ephestia zea* [= *interpunctella*]; food-habits of the larva.
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1898. [RILEY, C. V.] Grape-vine apple-gall. <Amer. Ent., September, 1880 [v. 3], n. s., v. 1, p. 229, fig. 119.  
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Description of *Phylloxera carya-scissa* n. sp. and *P. carya-avellana* n. sp. from Florida; larva of *Diplosis* found in the galls.
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Notice of recent articles on the ravages of the larva of *Diabrotica longicornis*; food-habits and means against the same; food-habits of *Drasterius amabilis*.
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Notice of a congress to be held in Spain to consider all topics connected with the ravages of *Phylloxera vastatrix*.

1907. [RILEY, C. V.] The grape *Phylloxera* not permanently destructive. <Amer. Ent., October, 1880 [v. 3], n. s., v. 1, p. 248.  
Recovery of grape-vines formerly injured by *Phylloxera vastatrix* in California and Missouri; belief that in Europe grape-vines will be grown again on the lands of late years ravaged.
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\$6,000,000 worth of silk-worm eggs sent from Japan to France via San Francisco in each of the four years 1874-1877.
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Obituary notice.
1910. [RILEY, C. V.] [Retirement of Mr. Fuller.] <Amer. Ent., October, 1880 [v. 3], n. s., v. 1, p. 248.  
Announcement of the retirement of A. S. Fuller as assistant editor of the American Entomologist.
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Brief sketch of the natural history of *Cicada* [= *Tibicen*] *septendecim* and *C. [= T.] tredecim*, with figures of all stages and of punctured twigs; the reputed stinging by these insects probably done by *Stizus grandis* [= *Sphectus speciosus*]; figure of the *Stizus*; recommends the substitution of the name "periodical Cicada" in place of the name "locust."
2015. RILEY, C. V. Entomological notes. <Farmer's Review, 22 September, 1881. S.-b. No. 42, pp. 54-55. Reprint: <Amer. Nat., [3] December, 1881, v. 15, pp. 1012-1013. See: <Sci. Amer., 11 February, 1882. S.-b. No. 38, p. 1½.  
Abstract and critical review of paper by M. Saint-André; attempted explanation of the immunity of grape-vines in sandy soil from the ravages of *Phylloxera vastatrix*.
2016. RILEY, C. V. Notes on *Hydrophilus triangularis*. <Amer. Nat., October [23 September], 1881, v. 15, pp. 814-817, figs. 1-2.  
Description and figures of egg-case and figures of eggs and of male imago, with structural details of *Hydrophilus triangularis*; characters and life-history of the larva and pupa; figures of eggs, egg-case, larva, and pupa of *H. picus* of Europe.
2017. [RILEY, C. V.] Migration of plant-lice from one plant to another. <Amer. Nat., October [23 September], 1881, v. 15, pp. 819-820.  
Exposition of J. Lichtenstein's theory that most *Aphidida*, especially gall-making *Pemphigini*, live upon two different plants in passing through their cycle of development; cites instances in which the host-plants are of different families.
2018. [RILEY, C. V.] The chinch-bug. <Amer. Nat., October [23 September], 1881, v. 15, pp. 820-821.  
The abundance of *Blissus leucopterus* is connected with the moisture of the season; extraordinary noxiousness of this insect in the dry season of 1881 in various parts of the United States.

2019. [RILEY, C. V.] *Phylloxera* laws. <Amer. Nat., October [23 September], 1881, v. 15, p. 821.  
Summary of the existing laws regulating the traffic in plants, with a view of preventing the introduction of *Phylloxera vastatrix* into different countries.
2020. [RILEY, C. V.] One-half the vine area of France affected by *Phylloxera*. <Amer. Nat., October [23 September], 1881, v. 15, p. 821.  
Statement that nearly one-fourth of the area of vineyards in France is destroyed by *Phylloxera vastatrix* and as much more attacked; submersion the only sure remedy, and the use of American resisting stocks the only available preventive.
2021. [RILEY, C. V.] London purple and Paris green. <Amer. Nat., October [23 September], 1881, v. 15, p. 821.  
London purple more than twice as efficacious and less expensive than Paris green as an insecticide; it needs to be well ground; composition of London purple.
2022. [RILEY, C. V.] Entomologist for the Pacific coast. <Amer. Nat., October [23 September], 1881, v. 15, pp. 821-822.  
Notice of attempts made to have a State entomologist appointed in California.
2023. [RILEY, C. V.] *Dilar* in North America. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.  
Notice of paper by R. McLachlan.
2024. [RILEY, C. V.] Locusts in Nevada. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.  
Statement from Reno [Nev.] Journal that the countless locusts which hatched in western Nevada in the spring of 1881 flew toward the Sierra Nevada without doing any injury.
2025. [RILEY, C. V.] Odor in butterflies. <Amer. Nat., October [23 September], 1881, v. 15, p. 822.  
Notice of paper by Miss M. E. Murtfeldt.
2026. RILEY, C. V. General index and supplement to the nine reports on the insects of Missouri. <Bull. No. 6, U. S. Ent. Commission [24 March], 1881, 178 pp.  
Order of matter: (1) Introduction. (2) Table of contents. (3) Corrections. (4) Notes and additions. (5) Descriptions of new species and varieties. (6) List of descriptions of adolescent states. (7) List of descriptions, mostly amplified, of species not new. (8) List of illustrations by reports. (9) Classified list of illustrations. (10) General index. (11) Index to food-plants.
2027. [RILEY, C. V.] The permanent subsection of entomology at the recent meeting of the A. A. A. S. <Amer. Nat., 1881, v. 15, November [28 October], pp. 909-912; [3] December, pp. 1008-1011.  
Notice of the meeting at Cincinnati, Ohio, August, 1881, with abstracts and notices of papers read.
2028. RILEY, C. V. The new imported clover enemy. <Amer. Nat., November [28 October], 1881, v. 15, pp. 912-914.  
Occurrence and habits of *Phytonomus punctatus* in New York; description of the egg and larva of the same; food-plants of the European species of *Phytonomus*.

2029. RILEY, C. V. *Crambus vulgivagellus*. <Amer. Nat., November [28 October], 1881, v. 15, pp. 914-915.  
Excessive abundance of this species in the eastern United States in 1881; description of the egg; method of oviposition.
2030. RILEY, C. V. Larval habits of *Sphenophori* that attack corn. <Amer. Nat., November [28 October], 1881, v. 15, pp. 915-916.  
Several species of *Sphenophorus* injurious to maize-plants in different parts of the United States; habits and ravages of *S. robustus*.
2031. [RILEY, C. V.] Effect of drought on the Hessian fly. <Amer. Nat., November [28 October], 1881, v. 15, p. 916. See: <N. E. Farmer, 10 December, 1881. S.-b. No. 45, p. 39. <Farmer's Review, 15 December, 1881. S.-b. No. 45, p. 99.  
Hot and dry weather dries up and kills *Cecidomyia destructor* and its parasites.
2032. [RILEY, C. V.] *Simulium* from Lake Superior. <Amer. Nat., November [28 October], 1881, v. 15, p. 916.  
Notice of paper by H. A. Hagen; larvæ and pupæ from Lake Superior similar to those of *S. pictipes*, but the imagoes from the same locality are different.
2033. [RILEY, C. V.] Coleopterous cave fauna of Kentucky. <Amer. Nat., November [28 October], 1881, v. 15, pp. 916, 917.  
Notice of H. G. Hubbard's investigations; *Adelops* contains but one species, which seems to be equally common in all caves in the State; *Ancphthalmus* contains several species, and more may be expected to be found.
2034. [RILEY, C. V.] Hemipterological studies. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.  
Notice of paper of V. Signoret.
2035. [RILEY, C. V.] Entomology in Buffalo, N. Y. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.  
Notice of Vol. 4, No. 1, of the Bulletin of the Buffalo Society of Natural Science; list of entomological papers therein.
2036. [RILEY, C. V.] *Lampyridæ*. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.  
Notice of paper by J. L. Leconte.
2037. [RILEY, C. V.] Severe cold and hibernating apple-worms. <Amer. Nat., November [28 October], 1881, v. 15, p. 917.  
According to A. J. Cook larvæ of *Carpocapsa pomonella* were killed in their cocoons where exposed to the severe cold of the winter of 1880-1881.
2038. RILEY, C. V. [Address delivered 4 November, 1881, at the cotton convention held in Atlanta, Ga., 2-4 November, 1881.] <[U. S. Department of Agriculture.] Address of Hon. George B. Loring... and other proceedings of the cotton convention, Washington, 1881, pp. 19-35. Reprint: <Atlanta Constitution, 5 November, 1881. S.-b. No. 24, p. 34.  
Beneficial and injurious influence of insects; methods of counteracting the same; ravages and natural history of and search for means against *Aletia argillacea* [= *xylina*]; improved methods and contrivances for the application of poisons to plants.



2039. RILEY, C. V. The chinch bug. <Amer. Agric., November, 1881, v. 40, p. 476, figs. 1-3. S.-b. No. 42, pp. 21-23.  
Ravages, food-plants, and natural history of *Blissus leucopterus*; descriptions and figures of its several stages and of dimorphic form of the imago; effect of wet weather upon it.
2040. [RILEY, C. V.] Retarded development in insects. <Amer. Nat., [3] December, 1881, v. 15, pp. 1007-1008. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1881, [13 October], 1882, v. 30, pp. 270, 271. Notice: <Gardener's Chronicle, 27 May, 1882, v. 17, pp. 708-709. S.-b. No. 42, p. 31.  
Eggs of *Caloptenus spretus* retained their vitality four and one-half years under abnormal environment and then hatched on exposure to normal conditions; speculations on the cause of the phenomena of retardation of development.
2041. [RILEY, C. V.] Preparation of Diptera. <Amer. Nat., [3] December, 1881, v. 15, p. 1008.  
Notice of paper of J. Mik.
2042. [RILEY, C. V.] Another herbivorous ground-beetle. <Amer. Nat., [3] December, 1881, v. 15, p. 1011.  
*Anisodactylus confusus* injuring strawberry-plants in California.
2043. [RILEY, C. V.] A disastrous sheep parasite. <Amer. Nat., [3] December, 1881, v. 15, p. 1011.  
A parasite (*Trichodectes ovis*?) doing great injury to sheep in Illinois.
2044. [RILEY, C. V.] Locusts in the West. <Amer. Nat., [3] December, 1881, v. 15, p. 1013.  
*Caloptenus spretus* scarce in Colorado and Kansas; *Camnula pellucida* abundant on the Pacific coast; destructiveness of locusts in many parts of South America and of *Pachytylus migratorius* in Turkey; means adopted against the latter.
2045. [RILEY, C. V.] Structure of the claw in *Psocina*. <Amer. Nat., [3] December, 1881, v. 15, pp. 1013-1014.  
Notice of paper of H. A. Hagen.
2046. [RILEY, C. V.] Insect collection for sale. <Amer. Nat., [3] December, 1881, v. 15, p. 1014.  
Notice of the collection of Coleoptera left by C. Trabant.
2047. RILEY, C. V. Peach-tree bark-borer. Important note from Prof. C. V. Riley. <Rural New Yorker, 24 December, 1881, v. 40, p. 866. S.-b. No. 42, p. 13.  
Habits and ravages of *Phloeotribus liminaris*; means against bark-borers.
2048. RILEY, C. V. The chinch-bug. <Amer. Agric., December, 1881, v. 40, p. 515, figs. 1-4. S.-b. No. 42, pp. 23-26.  
Figures *Anthrenus* [= *Triphleps*] *insidiosus* and *Harpactor* [= *Milyas*] *cinclus* as enemies of *Blissus leucopterus* and *Nysius destructor* [= *angustatus*] and *Piesma cinerea* as likely to be confounded with it; mentions other enemies of the chinch-bug; means against it; importance of irrigation.
2049. RILEY, C. V. On the oviposition of *Prodoxus decipiens*. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, pp. 62-63. Reprint: <Proc. Amer. Assoc. Adv. Sci. for 1881 [13 October],

## 2049. RILEY, C. V.—Continued.

1882, v. 30, p. 272. Separate: <[Salem, Mass., February, 1882], p. 3.

Time and manner of oviposition of *Prodoxus decipiens* in stem of *Yucca filamentosa*.

## 2050. [RILEY, C. V.] Olover insects. &lt;Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 63.

Notice of paper of J. A. Lintner.

2051. RILEY, C. V. Horn's classification of the *Carabidae*. <Amer. Nat., January, 1882 [30 December, 1881], v. 16, pp. 63-64.

Notice of paper of G. H. Horn.

## 2052. [RILEY, C. V.] The butterfly-trees of Monterey again. &lt;Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 64.

Swarming and migrating habits of *Danaus archippus*; hibernation of the same.

## 2053. [RILEY, C. V.] Interest felt in economic entomology in California. &lt;Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 65.

Notice of a call issued by the Board of State Horticultural Commissioners of California for a State convention to consider horticultural subjects, including means against insects.

## 2054. [RILEY, C. V.] Obituary. &lt;Amer. Nat., January, 1882 [30 December, 1881], v. 16, p. 65.

Biographical notice of J. D. Putnam; announcement of the death of G. V. Mniszech.

## 2055. RILEY, C. V. New insects injurious to agriculture. &lt;Amer. Nat., February [25 January], 1882, v. 16, pp. 151-152. Reprint: &lt;Proc. Amer. Assoc. Adv. Sci. for 1881, [13 October], 1882, v. 30, pp. 272-273.

The occurrence of previously unnoticed noxious insects due to, 1, the introduction of species from abroad; 2, previously existing unnoticed species; and 3, the acquisition of new habits by previously known innocuous species; in the last case the acquisition of new habits may be accompanied by the acquisition of new descriptonal character, thus constituting a new species; new species thus become developed within brief periods of time.

## 2056. [RILEY, C. V.] New entomological periodicals. &lt;Amer. Nat., February [25 January], 1882, v. 16, pp. 152-153.

Notice of several prospective periodicals.

## 2057. [RILEY, C. V.] Locust probabilities for 1882. &lt;Amer. Nat., February [25 January], 1882, v. 16, p. 153.

Favorable prospects of immunity from ravages of *Caloptenus spretus* in 1882.

## 2058. [RILEY, C. V.] Entomological notes. &lt;Amer. Nat., February [25 January], 1882, v. 16, p. 153.

Notice of J. J. Weir's paper on the "Lepidoptera of the Outer Hebrides," etc.

## 2059. [RILEY, C. V.] Bibliography of gall literature. &lt;Amer. Nat., March [24 February], 1882, v. 16, pp. 246-247.

Notice of the record of F. Thomas.

2060. RILEY, C. V. A new depredator infesting wheat-stalks. <Amer. Nat., March [24 February], 1882, v. 16, pp. 247-248, fig. 1.

*Isosoma allynii* French is a species of *Eupelmus* probably parasitic on some of the wheat-stalk feeders and on some species of *Chlorops*; habits and figures of larva and description of female imago of *Isosoma tritici* [p. 247]; comparisons between *I. tritici* and *I. hordei*; alleged habits of *I. lineare* of Europe; relative conspicuousness of the "humeral spot" in European, American, and Australian species of *Isosoma*. See No. 2063.

2061. RILEY, C. V. Further notes on the imported clover-leaf weevil (*Phytonomus punctatus*). <Amer. Nat., March [24 February], 1882, v. 16, pp. 248, 249.

Identity of *Phytonomus opimus* Lec. with *P. punctatus* Fab.; instances in which injurious insects have been overlooked for a long time; probability that plant-feeding Coleoptera imported from Europe will not spread far from the Atlantic coast; some species, injurious in Europe, are thus far innocuous in America; hibernation of and means against *P. punctatus*.

2062. [RILEY, C. V.] Silk-worm eggs; prices and where obtained. <Amer. Nat., March [24 February], 1882, v. 16, pp. 249-250.

Sources from which eggs of *Sericoaria mori* can be obtained in the United States for purposes of silk-culture; prices at which eggs are sold by Crozier & Co.

2063. RILEY, C. V. The wheat *Isosoma*. A new depredator infesting wheat-stalks. <Rural New Yorker, 4 March, 1882. S.-b. No. 42, pp. 55-56. See: <Sci. Amer. Suppl., 17 June, 1882. S.-b. No. 37, p. 57.

Description of female imago of *Isosoma tritici*; habits, ravages, and distribution of and means against the same; comparison with related species; a probable parasite of it, described as *Isosoma allynii* by G. H. French, belongs to the genus *Eupelmus*. See No. 2060.

2064. RILEY, C. V. Possible food-plants for the cotton-worm. <Amer. Nat., April [22 March, 1882], v. 16, pp. 327-329. Reprint: <Rept. [U. S.] Com. Agric. for 1881 and 1882, 1882 [January, 1883], pp. 164-166. Separate: <pp. 164-166.

Food-plants of *Aletia xyliana*. See No. 2119 for synopsis of contents.

2065. [RILEY, C. V.] Mode of feeding on the larva of *Dytiscus*. <Amer. Nat., April [22 March], 1882, v. 16, p. 330.

Notice of paper of E. Burgess; structure of the mouth of the larva of *Dytiscus*; manner in which this larva feeds.

2066. [RILEY, C. V.] Entomological notes. <Amer. Nat., April [22 March], 1882, v. 16, p. 330.

Brief notices of several articles recently published with items of news.

2067. [RILEY, C. V.] Riley's researches. Orange insects and the cotton-worm; how the orange insect operates and the cure for its ravages; the hibernation of the cotton-worm; settlement of a mooted question. <Florida Daily Times, 29 March, 1882. S.-b. No. 42, pp. 28-29.

Report of interview with C. V. Riley; discovery by W. H. Ashmead that "orange rust" is caused by a mite; habits of and means against the same;

## 2067. RILEY, C. V.—Continued.

successful application by H. G. Hubbard of an emulsion of kerosene and milk as a means against this mite and against scale-insects; proof of the hibernation of *Aletia argillacea* [= *xyliæ*] in the extreme south of the United States; means against the *Aletia*.

2068. RILEY, C. V. Prof. C. V. Riley and the Yucca moth. <Gardener's Mo. and Hortic., March, 1882, v. 24, p. 92. S.-b. No. 23, pp. 198-199.

Critical review and reply to editorial of T. Meehan.

2069. RILEY, C. V. The *Noctuidæ* in the Missouri entomological reports. <Papilio, March, 1882, v. 2, pp. 41-44. Separate: <N. Y., 1882, 4 pp.

Critical review of paper of A. R. Grote; discussion of the synonymy of the *Noctuidæ* in the Missouri entomological reports.

2070. RILEY, C. V. Silk-culture in the United States. <Sci. Amer., 1 April, 1882 [v. 60], n. s., v. 46, p. 193. S.-b. No. 42, pp. 93-96.

Statement of the dangers to be avoided and the obstacles to be overcome for the successful establishment of silk-culture in the United States.

2071. RILEY, C. V. Little known facts about well known animals. A lecture delivered in the National Museum, Washington, D. C., April 8, 1882. <Washington, April, 1882, 32 pp., figs. See: <National Farmer, 13 July, 1882. S.-b. No. 42, p. 15. <Prairie Farmer, 22 July, 1882. S.-b. No. 46, p. 99.

The entomological subjects include brief and popular illustrated accounts of the life-histories and transformations of the house-fly (*Musca domestica*) and mosquito (*Culex pipiens*); the development of *Trombidium* from *Astoma*; parasitism; truth of the theory of evolution; reasons for the prevalent ignorance of natural history; interest and value of a knowledge of natural history.

2072. RILEY, C. V. Lichtenstein's theory as to dimorphic asexual females. <Amer. Nat., May [24 April], 1882, v. 16, p. 409.

Criticism of J. Lichtenstein's theory that winged female *Aphididæ* and asexual female *Cynipidæ* are larvæ, and their eggs pupæ; errors in the comparison of these forms with the hypermetamorphic stages of *Meloidæ*.

2073. [RILEY, C. V.] Naphthaline cones for the protection of insect collections. <Amer. Nat., May [24 April], 1882, v. 16, pp. 409-410.

Use of and objections to the use of naphthaline cones; formula of a preferable protective mixture.

2074. [RILEY, C. V.] Injurious insects in California. <Amer. Nat., May [24 April], 1882, v. 16, p. 410.

Notice of treatise of Matthew Cooke.

2075. [RILEY, C. V.] *Sarcophaga lineata* destructive to locusts in the Dardanelles. <Amer. Nat., May [24 April], 1882, v. 16, pp. 410-411.

Notice of communications, by F. Calvert, regarding the parasitic habits of *Sarcophaga lineata*, which preys upon *Edipoda cruciata*; egg-pods of the same locust destroyed by larvæ of *Callostoma fascipennis*.

2076. [RILEY, C. V.] Parasitic Diptera. <Amer. Nat., May [24 April], 1882, v. 16, p. 411.

*Dilophus* parasitic in larvae of *Chetoptria hypericiana*; the *Bibionidae* have hitherto been known only as vegetable feeders in the larval state.

2077. RILEY, C. V. The cotton-worm. <Times-Democrat [New Orleans], 7 May 1882, v. —, p. 4. S.-b. No. 42, pp. 29–31; 112–113; No. 63, pp. 47–48. Reprint: <Rept. [U. S.] Com. Agric. for 1881 and 1882, 1882 [January, 1883], pp. 157–159. Separate: <pp. 97–99.

See No. 2119 for synopsis of contents.

2078. RILEY, C. V. The house-fly. <Prairie Farmer, 13 May, 1882. S.-b. No. 39, p. 122. See: <Colman's Rural World, 15 June, 1882. S.-b. No. 68, p. 194. <Times-Democrat [New Orleans], 24 June, 1882. S.-b. No. 42, p. 31. <N. E. Farmer, 5 August, 1882.

Wide distribution of *Musca domestica*; identity of *M. harpyia* with the species; description of eggs; habits, transformations, and hibernation.

2079. RILEY, C. V. Habits of *Cybocephalus*. <Amer. Nat., June [20 May], 1882, v. 16, p. 514.

*Cybocephalus nigritulus* feeds on scales of *Chionaspis pinifolii* on *Pinus elliotii* in South Carolina, and *C. californicus* on a scale on apple-trees in California.

2080. [RILEY, C. V.] One effect of the Mississippi floods. <Amer. Nat., June [20 May], 1882, v. 16, pp. 514, 515.

Probability that *Ligyrrus rugiceps* will have been drowned out of the region submerged for months by the Mississippi River; liability of the importation of new foes with new seed-plants.

2081. [RILEY, C. V.] *Doryphora decemlineata* in England. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.

A living specimen carried from North America to London, England, in a barrel of potatoes.

2082. [RILEY, C. V.] Dr. Dimmock's inaugural dissertation. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.

Review of G. Dimmock's paper on "The anatomy of the mouth-parts and of the sucking apparatus of some Diptera."

2083. [RILEY, C. V.] The triungulin of *Meloidæ*. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.

The triungulin of *Meloe proscarabæus* was described by J. L. Frisch in 1727.

2084. [RILEY, C. V.] Fossil tineids. <Amer. Nat., June [20 May], 1882, v. 16, p. 515.

Notice of paper of V. T. Chambers; occurrence of the supposed burrow of a tineid larva in a fossil leaf of *Acer* sp.

2085. [RILEY, C. V.] Classification of North American Coleoptera. <Amer. Nat., June [20 May], 1882, v. 16, pp. 515–516.

Notice of the approaching completion of the classification of the Coleoptera of North America by J. L. Leconte and G. H. Horn.

2086. RILEY, O. V. Hibernation of the army-worm. <Amer. Nat., June [20 May], 1882, v. 16, p. 516.  
Confirmation of views in regard to the hibernation of the larvæ of *Leucania unipuncta*; places of oviposition; prospects of extensive injury by these insects in the more northern States in 1882.
2087. RILEY, O. V. Chinch-bug and army-worm prospects. <Rural New Yorker, 27 May, 1882. S.-b. No. 61, p. 27.  
*Blissus leucopterus* abundant in dry weather; *Leucania unipuncta* in wet weather; the latter hibernates principally as a larva; its eggs secreted in old grass and stubble; means against *L. unipuncta*.
2088. RILEY, O. V. Successful management of the insects most destructive to the orange. <Sci. Amer., 27 May, 1882 [v. 60], n. s., v. 46, pp. 335-336, 5 figs.  
Treats of *Coccidæ* injurious to the orange; means against the same; use of kerosene emulsion; figures stages of *Mytilaspis pomicoorticis* [= *pomorum*], *M. gloveri*, and *M. citricola*.
2089. RILEY, O. V. The utilization of ants in horticulture. <Nature, 8 June, 1882, v. 26, p. 126. Reprint: <Gardener's Chronicle, 17 June, 1882, v. 17, p. 805. S.-b. No. 42, p. 32.  
Abstract of paper of C. J. Macgowan; capture and sale of two species of ants which build nests in trees; colonization of these ants in orange orchards to destroy injurious insects.
2090. RILEY, O. V. The army-worm *vs.* the clover hay-worm. Remedies for the army-worm. <Rural New Yorker, 10 June, 1882. S.-b. No. 47, pp. 158-159; No. 61, pp. 32-33. Reprint: <Nat. Farmer, 22 June, 1882. S.-b. No. 37, p. 123. <Lancaster Farmer, July, 1882. S.-b. No. 46, p. 104. <Home and Farm, 1 July, 1882. S.-b. No. 37, p. 122.  
Abundance of *Leucania unipuncta* and *Asopia costalis* in Alabama and Tennessee; confusion of the army-worm with the clover hay-worm; prevalence of enemies of and means against the former.
2091. RILEY, O. V. Repelling insects by malodorants. <Amer. Nat., July [22 June], 1882, v. 16, p. 596.  
Critical review of paper of J. A. Lintner; odorous substances repel insects more by their toxic properties than by their odor; failure of attempts by the use of strongly smelling substances to prevent oviposition; sight, touch, and taste generally more important in insect economy than smell.
2092. [RILEY, O. V.] Habits of *Bittacus apterus*. <Amer. Nat., July [22 June], 1882, v. 16, pp. 596-597.  
Notice of paper of C. R. Osten Sacken; locomotion and food-habits of *Bittacus apterus* in California.
2093. RILEY, O. V. Habits of *Coscinoptera dominicana*. <Amer. Nat. July [22 June], 1882, v. 16, p. 598.  
Discovery by F. H. King that *Coscinoptera dominicana* is inquilinous in ants' nests in its earlier stages; similar habits of related species.
2094. [RILEY, O. V.] Sun-spots and insect life. <Amer. Nat., July [22 June], 1882, v. 16, pp. 598-599.  
Review of paper of A. H. Swinton; dependence of certain insect phenomena on the periods of sun-spots, through the determination by the latter of meteorological conditions.

2095. RILEY, C. V. The silk-worm. No. 1-3. <National Farmer, 13, 20, 27 July, 1882. S.-b. No. 35, p. 15; No. 48, pp. 32, 49.  
Nature of the silk-worm; stages, enemies, diseases, races; wintering and hatching of eggs; feeding and rearing of larvæ; the cocoons; spinning and gathering, chocking chrysalids; egg-laying, reproduction, reeling, food-plants.
2096. RILEY, C. V. Change of habit; two new enemies of the egg-plant. <Amer. Nat., August [28 July], 1882, v. 16, pp. 678-679.  
Sudden acquisition by *Doryphora juncta* and by *Cassida texana* of the habits of feeding on *Solanum melongena*, these species having been found previously on *S. carolinense* and *S. elaeagnifolium* respectively; occurrence of *C. texana* on *S. carolinense*; distribution of the two insects.
2097. RILEY, C. V. Notes on *Microgasters*. <Amer. Nat., August [28 July], 1882, v. 16, pp. 679-680.  
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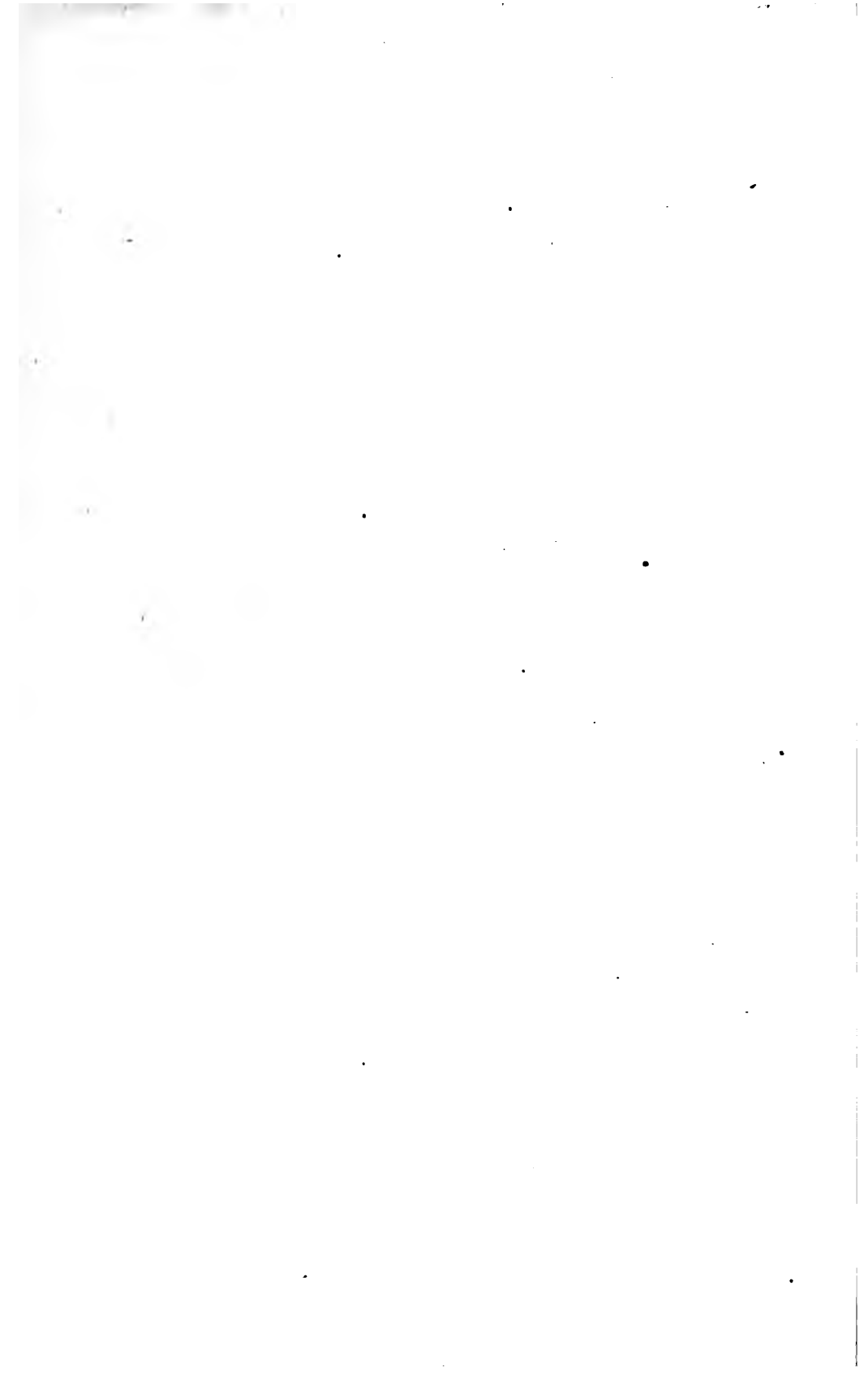
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TO

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BY

SAMUEL HENSHAW.

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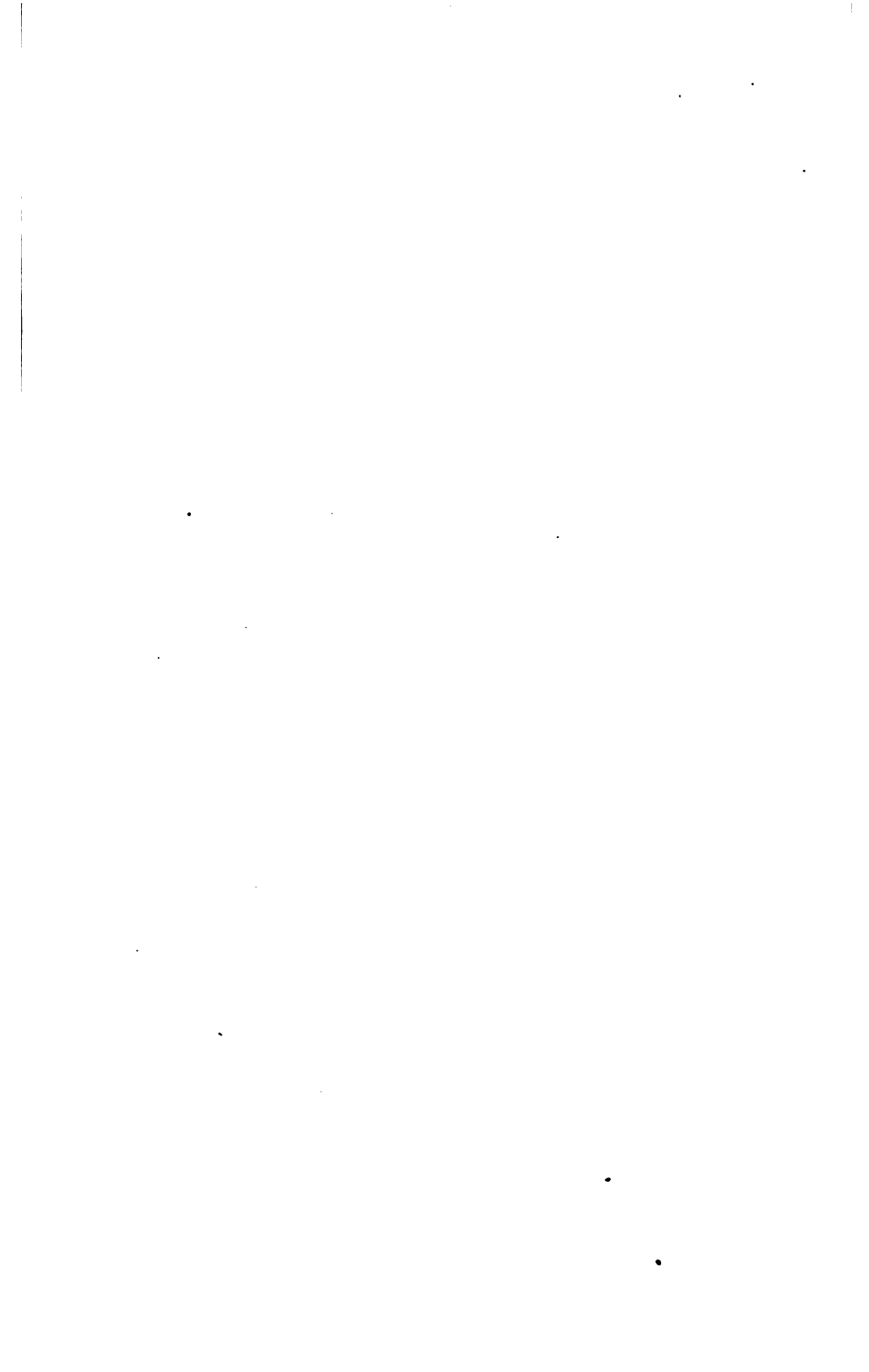
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[The Walsh and Riley names are followed by W. & R. The first number following the name refers to the number of the paper in the list, the second to the page where the species is first described. As is well known, the Walsh collection was destroyed in the Chicago fire in October, 1871. A few of the types sent to Drs. Hagen and Riley are in the collections of the Museum of Comparative Zoology at Cambridge and the National Museum at Washington. Those at Cambridge are indicated by a \*, those at Washington by \*\*.]

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[The types, without exception, are preserved in the collection of the National Museum, Washington, D. C.]

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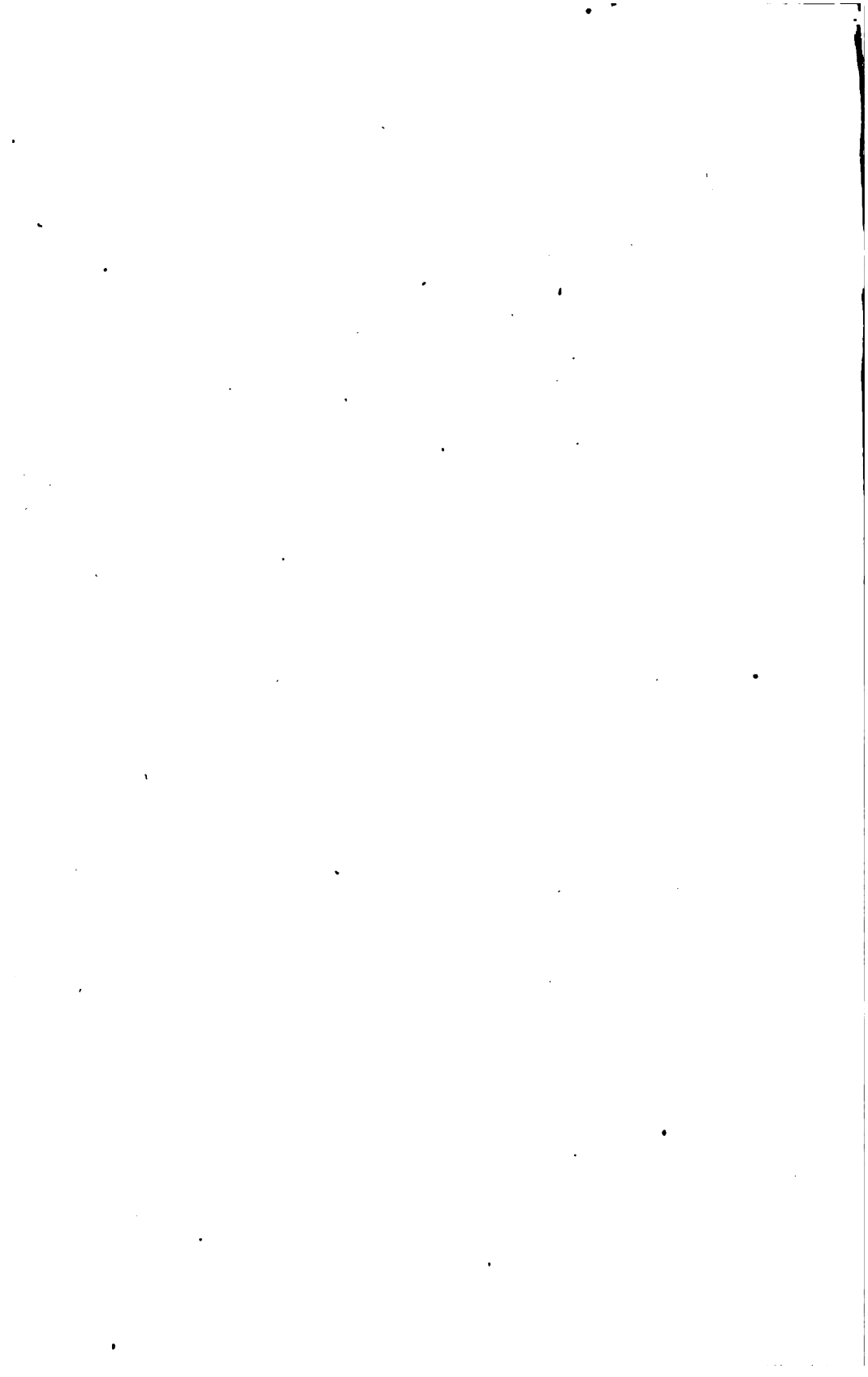
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\* Described and figured in A. S. Fuller's "Injurious insects." <Tilton's Journ. of Hort. and Florist's Companion, October, 1868, v. 4, pp. 207-209.

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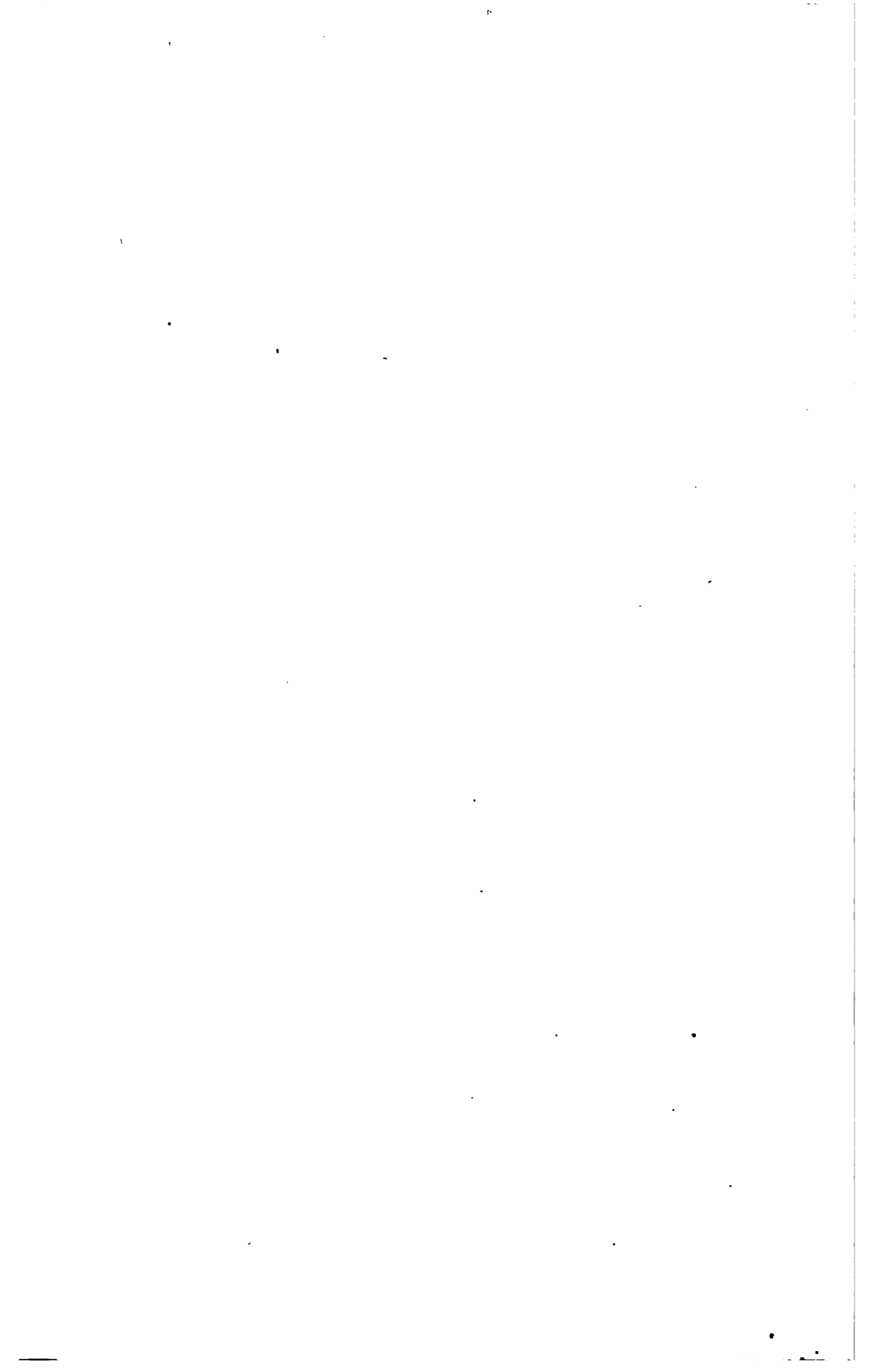
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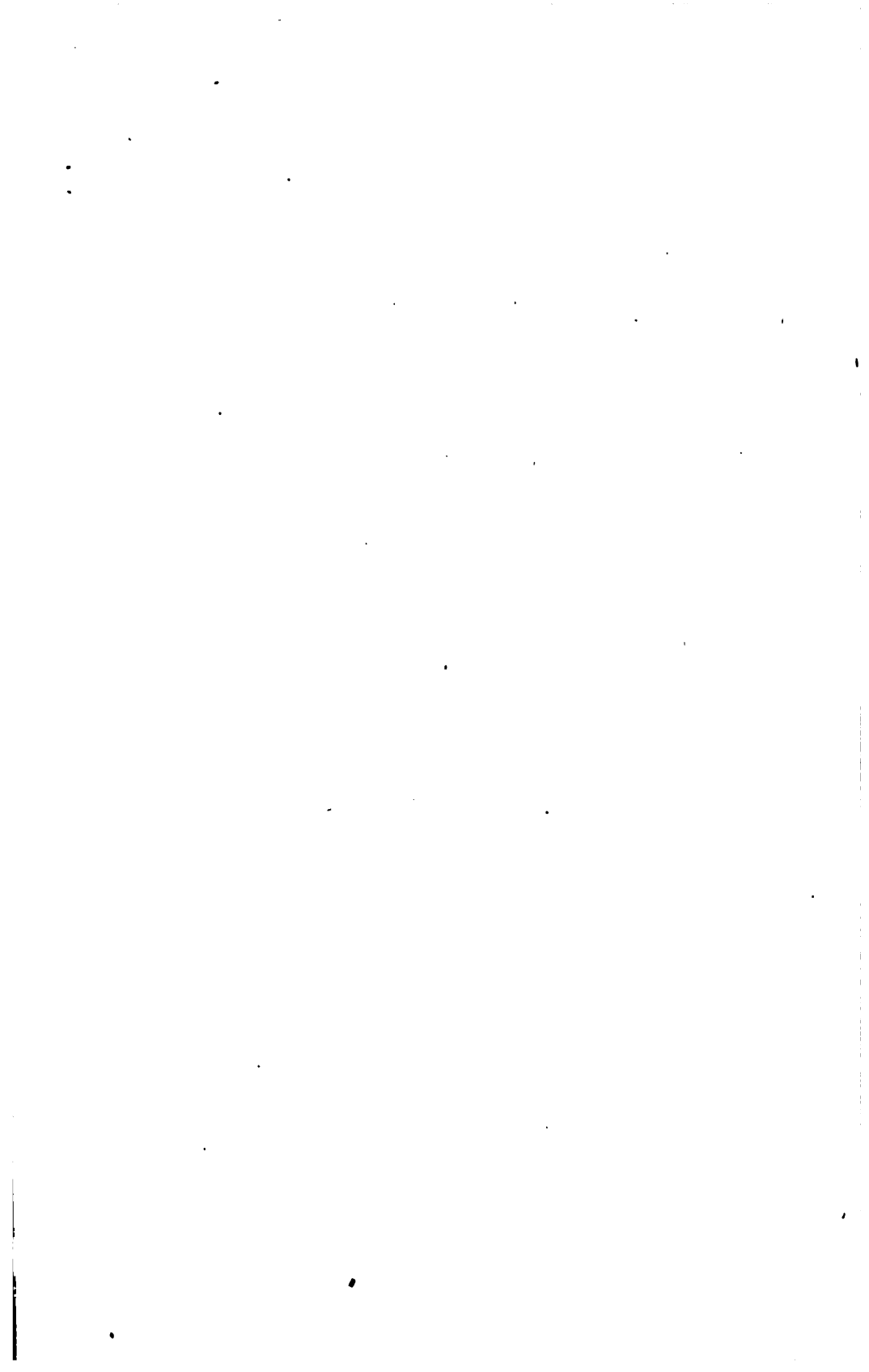
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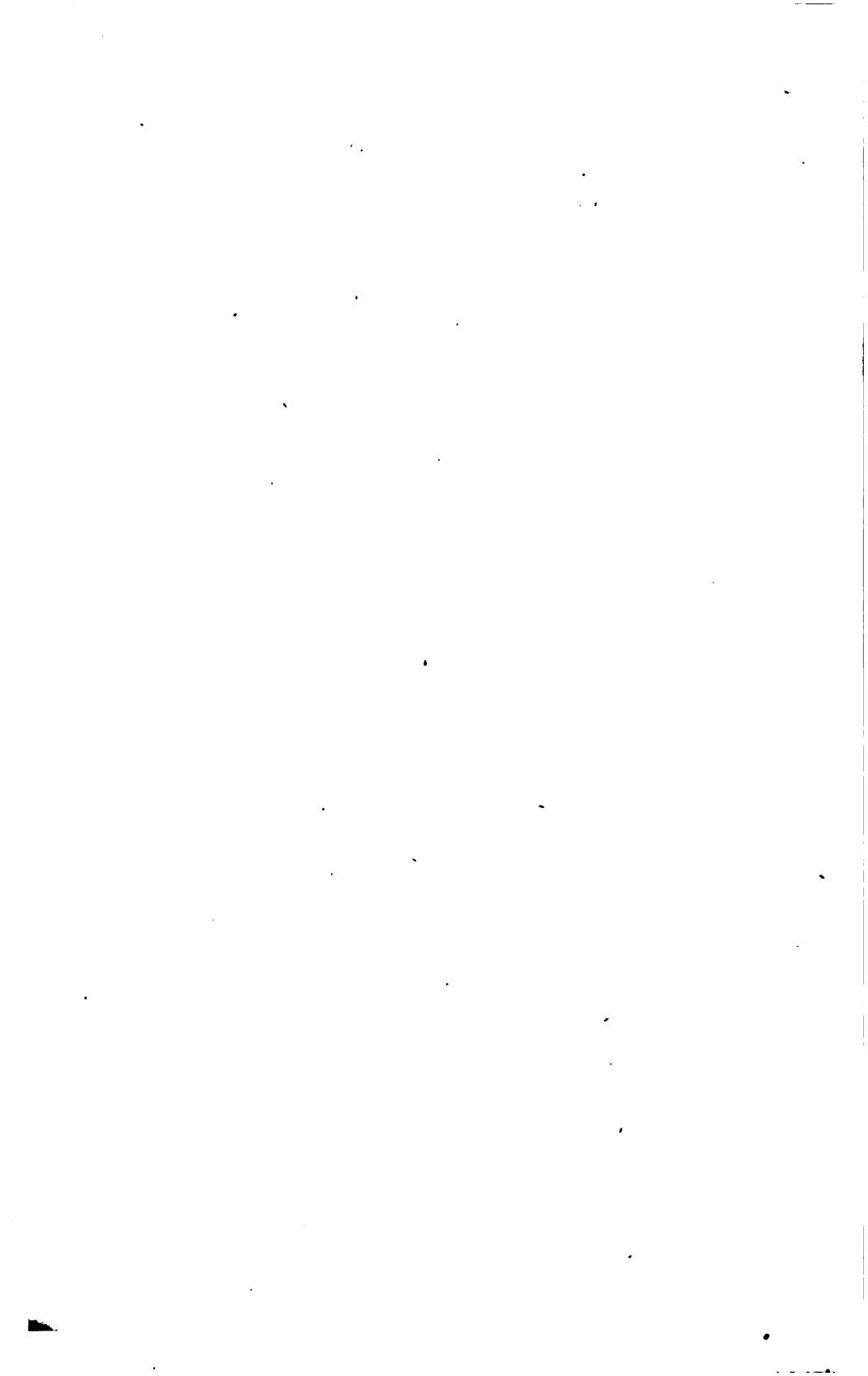
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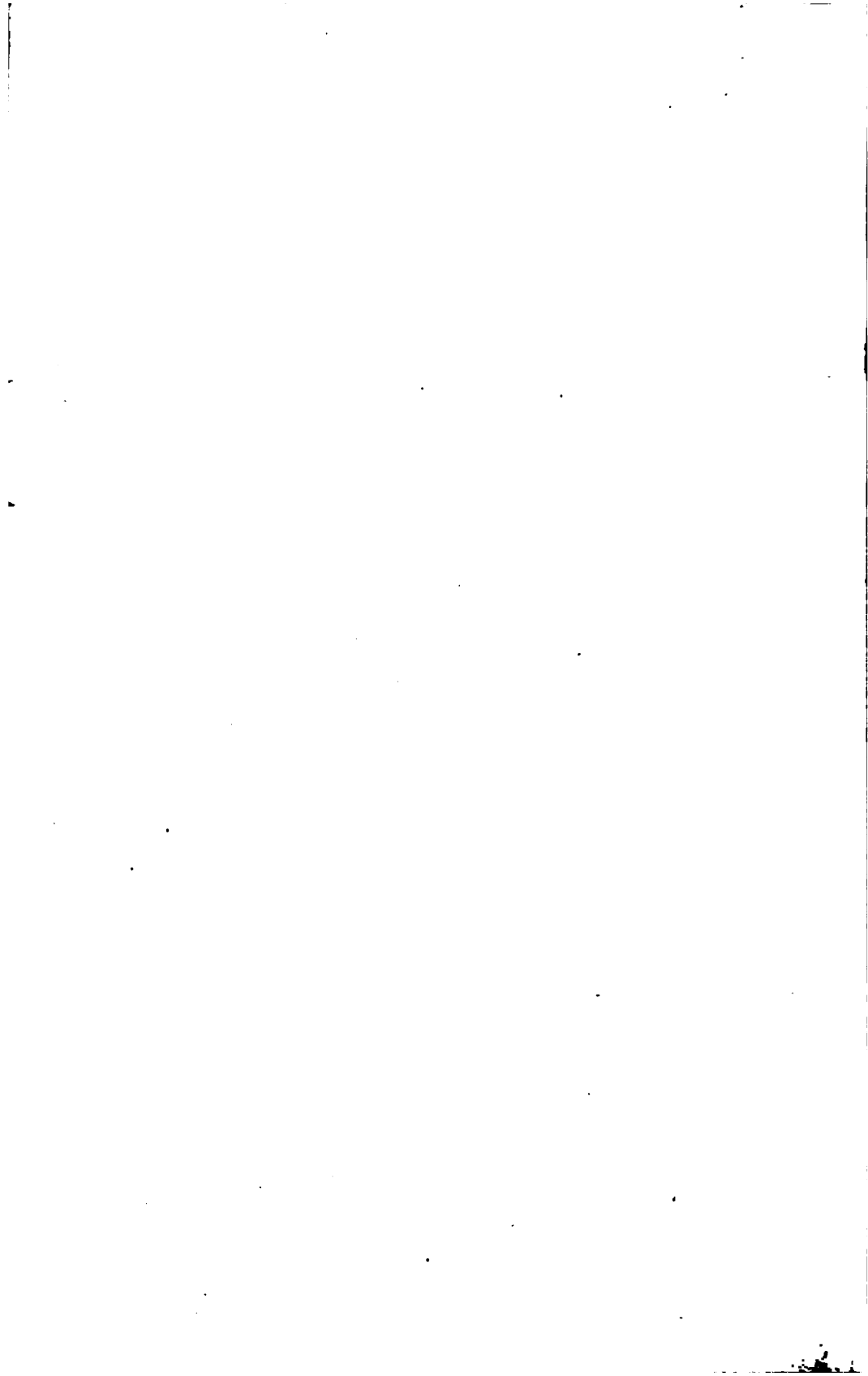












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